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ABSTRACT

This study explores the occupational aspirations and expectations of some 531 black and white high school youth of both sexes from predominantly lower and lower middle socioeconomic status families in four New York State communities; Megalopolis (New York City), Middletown (Elmira), Exurbia (Patchogue), and Capitol City (Albany). Data were gathered through responses to a research questionnaire relating to family structure, occupational aspirations, sources of influence on occupational development, and other variables; as well as through sociological indexes. The results showed that the level of occupational aspiration and expectation is related to sex, race, and urban configuration. In general, the specific conclusions suggest that three clusters of variables, related to entrepreneurial aspiration and expectation, occupational mobility, and occupational knowledge, deserve consideration by researchers and educators. (Author/JW)

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RACE, SEX, AND SOCIAL MOBILITY *AN EXPLORATION OF OCCUPATIONAL ASPIRATIONS AND EXPECTATIONS AMONG BLACK AND WHITE YOUTH IN FOUR NEW YORK STATE CITIES*

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1. INTRODUCTION: FOCUS OF INVESTIGATION

The study described in this report sought to explore the occupational aspirations and expectations of some 531 black and white high school youth of both sexes from predominantly lower and lower-middle socioeconomic status families in four New York State communities. The four communities were regarded as representative of four distinct urban configurations: Megalopolis (New York City), Middletown (Elmira), Exurbia (Patchogue), and Capitol City (Albany). Specifically, this investigation sought to answer the following research questions:

1. To what occupational levels do black and white high school youth of both sexes in four New York State urban configurations aspire? Is level of occupational aspiration related to race, sex, and urban configuration? To the other variables of principal research interest (entrepreneurial aspiration and expectation, knowledge of occupational roles, and social-occupational mobility) explored in this investigation?

2. What occupational levels do youth under investigation expect to enter? Is level of occupational expectation related to race, sex, urban configuration? To other variables of principal research interest?

3. How accurate is the knowledge possessed by youth under investigation of the requisite educational level, training time, specific aptitudes, physical demands and capacities, and working conditions associated with the occupations to which they aspire and those which they expect to enter? Is accuracy of knowledge about occupations aspired to and expected related to race, sex, urban configuration? To other variables of principal interest?

4. What "key figures" are reported by youth under investigation to have most greatly influenced their occupational aspirations and expectations? Is the influence of "key figures" differentially associated with interaction between race, sex, and urban configuration?

5. What sources are reported by youth under investigation to have most greatly influenced their occupational aspirations and expectations? Is the influence of these sources differentially associated with interaction between race, sex, and urban configuration?

6. What rates of social (occupational) mobility are aspired to and expected by youth under investigation? Is occupational (social) mobility associated with race, sex, urban configuration?

7. *How are the occupational aspirations and expectations of youth under investigation related to projected manpower needs in New York State?*

8. *Do youth under investigation aspire to and expect to become entrepreneurs or employees? Are entrepreneurial aspirations and expectations associated differentially with interaction between race, sex, urban configuration?*

9. *Are the self-concepts of youth under investigation and their perception of persons currently engaged in the occupations to which they aspire and those which they expect to enter related to race, sex, urban configuration?*

10. *What is the extent of future time perspective among youth under investigation? Is future time perspective related to race, sex, urban configuration? To other variables of principal research interest?*

11. *Are the work values held by youth under investigation related to race, sex, and urban configuration? To self-concept? To other variables of principal research interest?*

12. *How are the variables of principal research interest related to each other? Are other relationships discernible between the variables of principal interest and variables relative to the subject's family structure and work history?*

2. INSTRUMENTS AND SUBJECT CHARACTERISTICS

This investigation was conducted between October 1968 and June 1969 in four New York State communities at high schools identified by the chief administrators of each school district as enrolling primarily or exclusively youth from lower and lower-middle socioeconomic status families. Subjects were selected from among volunteers in each school who had been identified by school officials as belonging to such families. The instruments used in this study were, in the great majority of cases, administered to Ss off school premises, and Ss were paid for their participation in this study at the rate of $5.00 for a two-hour data collection session.

Data for this investigation were collected through two psychometric instruments and a questionnaire devised for use in this study. The SRA NON-VERBAL EXAMINATION, *employed to measure intelligence, is a brief test which is regarded as reasonably "culture-fair," if not "culture-free." Super's*

WORK VALUES INVENTORY, to be published for commercial use late in 1969, was released to the investigators by its publishers for use in this study. This instrument provides normative measures for each of 15 work values.

The bulk of the data gathered in this investigation was derived from subjects' responses to the questionnaire developed for use in this study, included as an appendix to this report. Items on the questionnaire seek information concerning race, nationality, religion, age, sex, family composition, occupational aspiration and expectation, geographic mobility, the influence of key figures and sources of information, plans upon finishing school, past work history, entrepreneurial aspiration and expectation, estimates of yearly earnings in occupations aspired and expected, job family similarity between the subject, his parents, and his paternal grandparent, and estimates of prestige levels of occupations aspired and expected. Also included in the questionnaire are a shortened form of Heimberg's FUTURE TIME PERSPECTIVE INDEX and a SEMANTIC DIFFERENTIAL SCHEDULE to measure the S's self-concept and his perceptions of persons employed in the occupation to which he aspires and the occupation he expects to enter. This schedule contains the nine bipolar adjective scales identified by Osgood and his associates (1957) as factor-pure measures of the evaluative, activity, and potency dimensions of "semantic space." Finally, the questionnaire contains the investigators' revision of the MUROV INDEX OF OCCUPATIONAL-KNOWLEDGE, used to measure knowledge of aspired-to and expected occupation. Though the questionnaire can be used on a self-administering basis, in this study it was employed essentially as a group interview schedule. The investigators and their associates proctored small groups of subjects through the questionnaire item-by-item. Each of the instruments employed was completed anonymously by most Ss.

Detailed explation of the variables measured through psychometric-instruments and through the questionnaire is offered later in this report in connection with specific statistical results.

In Capitol City, subjects were drawn from one of the two comprehensive high schools which serve the city. Located in the mid-town area, the school enrolls students from one of the city's two ghetto areas. Approximately 20% of its 1800 students are black. Middletown subjects were drawn from one of the city's two high schools. Approximately 15% of its 2400 students are black, and most of them are bussed into the white residential area where it is located. Because of the peculiar demography of its student population, school officials there were also asked to categorize each prospective subject as non-middle class before he was asked to participate in this study. Exurbia ia a "far-out" Long Island suburb of New York City, with a largely middle class population. Only 5% of the 1500 students in its single high school are black. In Megalopolis, subjects were drawn from three inner city schools located in racially tense areas. It is estimated that black populations in these school run between 70% and 90%. Some Megalopolis subjects, within a fortnight of their participation in this study, had been identified as potential drop-outs and invited to enroll in a special program.

The distribution of subjects classified by race, sex, and urban configuration is presented in Figure 1. Some 531 subjects participated in this study. Since only 240 subjects were black, blacks were moderately under-represented. Similarly, Megalopolis was slightly over-represented, with some 157 subjects. Since cell N's were considerably discrepant, analysis of variance for three-way factorial design, corrected for disproportionality, was adopted as the principal statistical test. Although 531 subjects were tested, complete data were available for only some 476; hence most computations were carried out with $N = 476$.

TABLE 1 reports cell means and associated F ratios for subjects' ages classified according to race, sex, and urban configuration in a three-way factorial analysis of variance. Only the F ratio for sex reaches significance: Male subjects, on the average, were six months older than female Ss. But no differences are noted in relation to race or to urban configuration.

Cell means and sources of variance for Ss' current socioeconomic status are reported in TABLE 2. Current socioeconomic status was measured by application of Hamburger's (1957) REVISED OCCUPATIONAL RATING SCALE to the occupation of the head of the S's household, with the resultant classification of that occupation on an ordinal scale ranging from 1 (high) to 7 (low). Though the Hamburger Scale values are ordinal, they are customarily treated statistically as integers. Hamburger regards levels 7 and 6 as lower class and level 5 as intermediate between lower and lower-middle status; he has described level 5 as "solidly working class." On this basis, levels 4 and 3 may be regarded as middle class status positions. F ratios reported in Table 2 for both race and urban configuration reach significance: The socioeconomic status level of the families of black Ss is significantly lower than that of white Ss, as one might expect. But the socioeconomic status levels of the families of Capitol City Ss, white or black, are significantly higher than those of Ss in other urban configurations. In fact means in three of the four Capitol City cells fall below 4, suggesting that these families are well within what can be reasonably regarded as lower middle class status positions. Hence, two sources of contaimination are evident in the data for this investigation: the association of higher status with white subjects and of higher status with Capitol City Ss, white or black. Nonetheless, in the main Ss appear to come from upper-lower and lower middle class families.

TABLE 3 summarizes cell means and sources of variance for Ss' raw scores on the SRA Non-Verbal Examination, a measure of intelligence. A significant F ratio is noted only for urban configuration: Middletown Ss, regardless of race, appear brighter. Surprisingly, however, the F ratio for race fails to reach significance. Hence, intelligence appears relatively homogeneous across races. But another source of contamination is evident: association of higher level of psychometric intelligence with Middletown Ss. It should be noted, however, that the rank order of mean intelligence by urban configuration does not follow the rank order of mean socioeconomic status by urban configuration.

FIGURE 1

DISTRIBUTION OF SUBJECTS BY RACE, SEX, AND URBAN CONFIGURATION

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	26	39	32	29
	BLACK	17	23	28	41
FEMALE	WHITE	59	32	34	36
	BLACK	26	35	23	51
SUM BY URBAN CONFIGURATION		128	129	117	157

TABLE 1

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE FOR SUBJECT AGE

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	17.23	17.05	16.69	16.83
	BLACK	17.14	16.65	16.82	17.00
FEMALE	WHITE	16.64	16.84	16.00	16.15
	BLACK	15.83	16.80	16.17	17.06

SOURCE	MEAN SO	D.F.	F RATIO	P LEVEL
SEX	19.716	1	13.6339	= .001
RACE	.001	1	.0000	≠ .05
URBAN CONFIGURATION	2.703	3	1.8690	≠ .05
SEX BY RACE	.226	1	.1561	≠ .05
SEX BY URBAN CONFIGURATION	3.348	3	2.315	≠ .05
RACE BY URBAN CONFIGURATION	3.848	3	2.6609	= .05
SEX BY RACE BY CONFIGURATION	1.970	3	1.3625	≠ .05
ERROR: WITHIN CELLS	1.446	460		

TABLE 2

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: CURRENT SOCIOECONOMIC STATUS

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	4.4615	4.8919	3.8788	5.2778
	BLACK	5.7143	5.3000	4.2314	5.5897
FEMALE	WHITE	4.4746	4.0000	3.8529	5.0000
	BLACK	5.3333	5.4000	3.5217	5.8654

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	5.073	1	1.5996	≠ .05
RACE	34.840	1	10.9857	= .001
URBAN CONFIGURATION	34.801	3	10.9736	= .001
SEX BY RACE	.183	1	.0577	≠ .05
SEX BY URBAN CONFIGURATION	.782	3	.2465	≠ .05
RACE BY URBAN CONFIGURATION	4.015	3	1.265	≠ .05
SEX BY RACE BY CONFIGURATION	3.439	3	1.0845	≠ .05
ERROR: WITHIN CELLS	3.171	460		

TABLE 3

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SRA NON-VERBAL IQ RAW SCORES

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	45.1538	57.5135	42.8182	37.7778
	BLACK	43.4286	46.4500	41.9643	38.3077
FEMALE	WHITE	44.4915	59.2121	43.7353	37.2308
	BLACK	46.5000	44.1714	43.6522	36.9615

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	8.288	1	.0104	≠ .05
RACE	901.706	1	1.1346	≠ .05
URBAN CONFIGURATION	2850.714	3	3.5866	= .01
SEX BY RACE	.125	1	.0002	≠ .05
SEX BY URBAN CONFIGURATION	25.510	3	.0321	≠ .05
RACE BY URBAN CONFIGURATION	868.070	3	1.0923	≠ .05
SEX BY RACE BY CONFIGURATION	53.031	3	.0667	≠ .05
ERROR: WITHIN CELLS	794.704	460		

While sources of contamination between classificatory variables and socioeconomic status and intelligence must be borne in mind in interpreting the results of this investigation, it should also be remarked that life circumstances have arranged interactive contaminants between variables, and that experimental manipulation to obviate contamination is likely to produce research results which are grossly misleading. For example, an IQ in the normal range is typical for a white student from a middle class family, but atypical for a lower class black. To so arrange a sample that IQ level is equated between races or between classes is to mask a reality of important psychological, social, and educational dimensions.

3. LEVEL OF OCCUPATIONAL ASPIRATION AND EXPECTATION

Levels of occupational aspiration and expectation were measured by application of the Hamburger Revised Occupational Rating Scale to the occupations to which Ss reported they aspired and expected to enter respectively (Questionnaire items 14, 18). Resultant Scale values were arrayed by sex, race, and urban configuration and treated through analysis of variance procedures for three-way factorial design with disproportional cell N's.

TABLE 4 reports cell means and sources of variance for socioeconomic status score associated with occupations to which Ss aspired. F ratios for sex, race, and urban configuration and for interaction between race and urban configuration each reach significance. Male Ss aspire to higher status occupations than female (F = 4.4642; P = .05). Black Ss aspire to higher status occupations than white (F = 12.6312; P = .001). Ss in Exurbia aspire to higher status occupations than Ss in Middletown, Megalopolis, or Capitol City. Black Ss in Exurbia, Capitol City, and Megalopolis aspire to higher status occupations than white Ss in these urban configurations. *The highest mean occupational aspiration level is noted among black females in Exurbia, whose aspirations on the average are toward upper class occupations, while the lowest mean level is noted among white females in Megalopolis.*

TABLE 5 presents cell means and associated F ratios for socioeconomic status associated with occupations which Ss expect to enter. Here, F ratios for race, for urban configuration, and for interaction between sex and urban configuration reach significance. Again, black Ss expect to enter higher status occupations than white (F = 4.0864; P = .05). Ss in Exurbia seek to enter higher status occupations than the Ss in other urban configurations. Females in Exurbia expect to enter higher status occupations than do males there, but males in Middletown expect to enter higher status occupations than Middletown females. *In general, the status level of the occupat-*

TABLE 4

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SOCIOECONOMIC STATUS ASPIRED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	3.2308	2.7568	3.0303	3.9444
	BLACK	2.4286	2.9000	2.7857	3.0000
FEMALE	WHITE	3.6102	3.4242	3.8235	4.0000
	BLACK	1.8333	3.2571	3.3043	3.6154

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	10.009	1	4.4642	= .05
RACE	28.319	1	12.6312	= .001
URBAN CONFIGURATION	10.608	3	4.7318	= .001
SEX BY RACE	1.284	1	.5726	≠ .05
SEX BY URBAN CONFIGURATION	2.259	3	1.0077	≠ .05
RACE BY URBAN CONFIGURATION	5.597	3	2.6651	= .05
SEX BY RACE BY CONFIGURATION	2.029	3	.9052	≠ .05
ERROR: WITHIN CELLS	2.242	460		

TABLE 5

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SOCIOECONOMIC STATUS EXPECTED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	3.8462	3.0541	3.4848	4.6111
	BLACK	3.2857	2.8500	3.6071	3.6410
FEMALE	WHITE	3.0169	3.6970	3.8529	3.7692
	BLACK	2.1667	3.2857	3.7826	3.7885

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	1.337	1	.4973	≠ .05
RACE	10.987	1	4.0864	= .05
URBAN CONFIGURATION	13.468	3	5.0089	= .01
SEX BY RACE	.115	1	.0429	≠ .05
SEX BY URBAN CONFIGURATION	9.378	3	3.4879	= .05
RACE BY URBAN CONFIGURATION	1.947	3	.7240	≠ .05
SEX BY RACE BY CONFIGURATION	1.918	3	.7135	≠ .05
ERROR: WITHIN CELLS	2.689	460		

ion which the subject expects to enter is at an adjacent but lower status relative to the occupation to which he aspires. It is both surprising and disheartening to note that not a single cell mean falls at 2 or below, indicating that, on the whole, subjects do not expect to enter occupations which are regarded as associated with upper socioeconomic status levels.

It may be appropriate to remark at this point that the results reported in Tables 4 and 5 do not seem to follow results reported in Tables 2 and 3, which demonstrated confounding effects within race and urban configuration as classificatory variables. In other words, if Exurbia Ss both aspire to and expect to enter higher level occupations than Capitol City Ss, whose current socioeconomic status is significantly higher, and than Middletown Ss, who are significantly higher in psychometric intelligence, the effects of residence in Exurbia reported in Tables 4 and 5 probably represent minimal estimates of the true association between criterion variables and Exurbian residence.

4. ACCURACY OF KNOWLEDGE ABOUT JOB ASPIRATION AND EXPECTATION

Accuracy of knowledge about the occupation to which the subject reports he aspires and the occupation which he expects to enter were measured through the investigators' revision of Murov's (1967) Index of Occupational Knowledge (Questionnaire items 128a through 169z). The subject is asked to indicate his estimate of the requisite educational level, the typical time needed for training, the two principal specific aptitudes, the customary work situation, the characteristic physical demands, and the typical working conditions associated with the occupation to which he aspires and the occupation which he expects to enter. Accuracy is determined by agreement of the subject's response on each item with the data published by the U.S. Department of Labor in the Dictionary of Occupational Titles under the code number associated with the titles of the occupations aspired to and expected by the subject. A maximum score of 9 is possible, representing one point for each agreement between the subject's estimate and D.O.T. data. In those cases in which the D.O.T. lists more than two "critical aptitudes" for any occupation, one point is scored for each agreement between either of the estimates made by S and any of the critical aptitudes listed. In this study D.O.T. data were read into the Univac 1107 for each occupational title corresponding to the occupational aspirations and expectations of subjects and the Murov Index was scored by computer.

Cell means and sources of variance for accuracy of knowledge about the jobs to which subjects report they aspire are reported in TABLE 6. Only the

TABLE 6

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE
FOR ACCURACY OF KNOWLEDGE ABOUT JOB ASPIRED TO

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	3.7962	4.2973	4.3636	3.6111
	BLACK	3.1429	4.6500	4.4286	3.7692
FEMALE	WHITE	4.3559	4.5152	4.5882	3.2308
	BLACK	4.3333	4.5714	4.0435	4.1154

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	3.80	1	1.9807	≠ .05
RACE	.13	1	.0697	≠ .05
URBAN CONFIGURATION	12.24	3	6.3675	= .01
SEX BY RACE	.23	1	.1202	≠ .05
SEX BY URBAN CONFIGURATION	4.21	3	2.1946	≠ .05
RACE BY URBAN CONFIGURATION	3.21	3	1.6747	≠ .05
SEX BY RACE BY CONFIGURATION	2.23	3	1.1643	≠ .05
RESIDUAL: WITHIN CELLS	1.92	460		

TABLE 7

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE
FOR ACCURACY OF KNOWLEDGE ABOUT JOB EXPECTED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	3.3077	4.1081	4.2112	3.7222
	BLACK	3.1429	4.9847	4.3929	3.5897
FEMALE	WHITE	4.0847	4.6364	4.5588	3.4615
	BLACK	4.1667	4.8857	4.1304	4.0577

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	11.15	1	5.5623	= .01
RACE	1.32	1	.6601	≠ .05
URBAN CONFIGURATION	16.16	3	8.0595	= .01
SEX BY RACE	.00	1	.0002	≠ .05
SEX BY URBAN CONFIGURATION	2.96	3	1.4760	≠ .05
RACE BY URBAN CONFIGURATION	1.05	3	.5249	≠ .01
SEX BY RACE BY CONFIGURATION	1.99	3	.9966	≠ .05
ERROR: WITHIN CELLS	2.00	460		

F ratio for urban configuration (6.3675) reaches significance (at .01). Ss in Middletown demonstrate the highest mean levels of knowledge about the occupations to which they aspire, Megalopolis Ss the lowest. It is instructive to note that cell means hover at or around 4.0 on a test with a ceiling of 9. In general, it appears that subjects are not well informed about the characteristics of the jobs to which they aspire: overall, they tend to demonstrate something less than fifty percent accuracy in a test of occupational knowledge focussed on their aspired to occupations.

TABLE 7 presents cell means and associated F ratios for accuracy of knowledge about the occupations which subjects expect to enter. The ratios for sex (5.5623) and for urban configuration (8.0595) reach significance at .01. Middletown Ss demonstrate the highest mean levels of knowledge about the occupations which they expect to enter, Megalopolis Ss the lowest. Female Ss demonstrate higher levels of knowledge than male Ss. Again, cell means hover around 4.0, but in the majority of cells accuracy of knowledge about the occupation aspired to seems somewhat higher than about the expected occupation, but probably not significantly so.

5. KEY FIGURES IN OCCUPATIONAL ASPIRATION AND EXPECTATION

The subject was asked to identify persons who had influenced him in his selection of the occupation he would like to enter and the occupation he expects to enter. A list of ten persons was presented to the subject (Questionnaire items 27a through 37s); his task was to indicate the persons whom he regarded as having exercised first, second, and third greatest influence upon his selection of aspired to and expected occupations, respectively. An eleventh category was provided, so that the subject could name a person not included on the initial list of ten. The person whom the subject identified as having exercised the single greatest influence was regarded as the "key figure" in his occupational aspiration or expectation process.

TABLE 8 reports observed frequencies arrayed by each of ten possible key figures (and the eleventh category) for subjects arranged according to interactive cells representing race-sex-urban configuration subsets. Frequencies expected by chance were computed according to marginal totals. The resultant Chi Square value (198.0224) reaches significance at .01. The influence of key figures is thus related to interaction between race, sex, and urban configuration: the influence of key figures upon occupational aspiration is associated with cell membership beyond chance prediction. Table

OBSERVED FREQUENCIES AND ASSOCIATED CHI SQUARE VALUE FOR INFLUENCE OF KEY FIGURES IN OCCUPATIONAL ASPIRATION

SUBJECT CELL CODE	PERSON IN JOB	BUDDY	PERSON IN OTHER JOB	RELATIVE	NEIGHBOR	FATHER	BROTHER -SISTER	COUNSELOR	MOTHER	TEACHER	OTHER
CAPITOL CITY MALE WHITE	07	01	01	00	01	06	03	03	01	06	01
CAPITOL CITY FEMALE WHITE	04	03	02	01	04	03	01	04	03	07	01
CAPITOL CITY MALE BLACK	06	00	01	03	01	04	02	02	04	04	01
CAPITOL CITY FEMALE BLACK	02	03	01	02	00	00	03	00	07	01	02
MIDDLETOWN MALE WHITE	10	04	02	01	01	04	02	00	02	05	04
MIDDLETOWN FEMALE WHITE	07	03	01	01	03	01	01	01	08	02	04
MIDDLETOWN MALE BLACK	03	02	01	00	00	02	00	02	03	01	04
MIDDLETOWN FEMALE BLACK	08	04	02	00	01	04	01	01	10	02	01
MEGALOPOLIS MALE WHITE	04	02	01	00	00	01	05	00	00	00	04
MEGALOPOLIS FEMALE WHITE	03	02	00	01	03	02	02	00	05	01	05
MEGALOPOLIS MALE BLACK	07	03	00	01	02	04	02	00	04	05	09
MEGALOPOLIS FEMALE BLACK	06	04	00	05	01	02	04	01	07	04	10
EXURBIA MALE WHITE	08	04	00	00	00	02	02	02	03	01	03
EXURBIA FEMALE WHITE	13	07	00	02	03	06	06	01	10	03	05
EXURBIA MALE BLACK	00	00	00	00	00	03	01	00	02	00	00
EXURBIA FEMALE BLACK	00	01	00	00	00	00	00	01	03	00	01
TOTAL BY KEY FIGURE	88	46	12	17	20	44	35	18	72	44	55
RANK ORDER BY KEY FIGURE	01	04	11	10	09	05	07	08	02	05	03

CHI SQUARE VALUE = 198.0224, SIGNIFICANTLY DIFFERENT FROM CHANCE DISTRIBUTION AT P LEVEL = .01 OR BEYOND.

TABLE 8.1

OBSERVED FREQUENCIES AND ASSOCIATED CHI SQUARE VALUE FOR INFLUENCE OF KEY FIGURES IN OCCUPATIONAL EXPECTATION

SUBJECT CELL CODE	PERSON IN JOB	BUDDY	PERSON IN OTHER JOB	RELATIVE	NEIGHBOR	FATHER	BROTHER -SISTER	COUNSELOR	MOTHER	TEACHER	OTHER
CAPITOL CITY MALE WHITE	08	01	00	03	01	08	02	03	02	02	01
CAPITOL CITY FEMALE WHITE	03	03	01	01	03	03	02	02	08	04	03
CAPITOL CITY MALE BLACK	09	02	00	02	00	03	00	04	03	02	01
CAPITOL CITY FEMALE BLACK	02	04	01	00	00	00	05	00	06	02	01
MIDDLETOWN MALE WHITE	07	04	01	03	00	05	03	02	02	05	04
MIDDLETOWN FEMALE WHITE	07	00	01	02	02	01	02	01	14	01	01
MIDDLETOWN MALE BLACK	02	03	03	01	00	01	01	02	02	01	03
MIDDLETOWN FEMALE BLACK	09	03	02	00	02	03	01	02	10	02	00
MEGALOPOLIS MALE WHITE	04	01	01	00	00	01	03	00	02	00	04
MEGALOPOLIS FEMALE WHITE	00	04	00	01	02	00	02	01	04	00	05
MEGALOPOLIS MALE BLACK	07	03	00	02	03	01	02	00	05	02	10
MEGALOPOLIS FEMALE BLACK	07	05	00	03	02	01	03	02	06	04	07
EXURBIA MALE WHITE	04	03	00	00	01	04	02	01	06	01	03
EXURBIA FEMALE WHITE	13	04	00	03	02	07	03	03	14	03	03
EXURBIA MALE BLACK	01	00	00	01	00	02	00	01	02	00	00
EXURBIA FEMALE BLACK	00	01	00	00	00	00	00	01	03	01	01
TOTAL BY KEY FIGURE	83	41	10	37	18	40	32	25	89	29	47
RANK ORDER BY KEY FIGURE	02	04	11	06	10	05	07	09	01	08	03

CHI SQUARE VALUE = 225.8456, SIGNIFICANTLY DIFFERENT FROM CHANCE DISTRIBUTION AT P LEVEL = .01 OR BEYOND.

8 also reports totals for frequency of citation of each key figure and the associated rank order of citation by all subjects taken as a group. The most frequently cited prime source of influence in occupational aspiration is a person who holds the job to which S aspires, with 88 citations, while S's mother is cited with second greatest frequency. School personnel appear to rank relatively low as prime sources of influence upon occupational aspiration: the teacher is cited 44 times and the counselor 18 times in a total of some 441 citations. The most potent cluster of key figures in occupational aspiration appears to be constituted by members of S's family: mother is cited 72 times, father 44, and brother or sister 35. Their influence appears to far overshadow the combined influence of teacher and counselor.

TABLE 8.1 reports observed frequencies of citation of key figures by S in relation to occupational expectation, arrayed by each of the ten key figures for subjects arranged according to interactive subsets. The resultant Chi Square value (225.8546) again reaches significance at .01. The influence of key figures upon occupational expectation is thus related to interaction between race, sex, and urban configuration: cell membership is associated with frequency of citation of particular key figures beyond chance prediction. Table 8.1 reports column totals for frequency of citation for each key figure and the associated rank order for all Ss taken as a group. In occupational expectation, S's mother appears to exercise greatest influence, with 89 citations, while a person who holds the job which S expects to enter ranks second, with 83 citations. The teacher is cited 29 times and the counselor 25: apparently the teacher is relatively less influential and the counselor more influential in occupational expectations than in occupational aspirations. Again the family constellation represents the most potent cluster of key figures.

6. KEY SOURCES OF INFLUENCE IN OCCUPATIONAL ASPIRATION AND EXPECTATION

The subject was asked to identify sources---school experiences, information media, personal conversations---which had influenced him in his selection of the occupation he would like to enter and the occupation he expects to enter. A list of 17 "sources of influence" was presented to the subject (Questionnaire items 39a through 56s), and his task was to indicate the sources which he regarded as having exercised, first, second or third greatest influence upon his selection of aspired to and expected occupations respectively. An eighteenth category was provided, so that the S could indicate a source not included in the initial pool of 17. The principal source which S identified as having exercised the single greatest influence was regarded as "key" in occupational aspiration and expectation.

TABLE 9 reports frequency of citation of sources of key influence by S in relation to occupational aspiration, arrayed by each of the 18 sources for Ss arranged according to interactive subsets. Frequencies expected by chance were computed according to marginal totals. The resultant Chi Square value (358.3554) reaches significance at .01. The influence of key sources upon occupational aspiration is thus related to interaction between race, sex, and urban configuration: cell membership is associated with frequency of citation of particular key sources of influence beyond chance prediction. Table 9 also reports totals for frequency of citation of each source by all Ss taken as a group, along with the associated rank order. The most frequently cited source is conversations with mother, quite consistent with findings relative to key figures, but conversations with buddies or personal friends is cited with next highest frequency. Conversations with persons who hold the job to which S aspires follow in third position. Traditional occupational information materials and books related to the occupation to which S aspires appear to have little influence. The effect of school experiences upon occupational aspiration is suggested by the citation of the school subjects in which S earned his highest grades as the fourth ranking source of influence.

TABLE 10 reports frequency of citation of sources of key influence by S in relation to occupational expectation, again arrayed by each of the 18 sources for Ss arranged according to interactive subsets. The resultant Chi Square value (387.4495) also reaches significance beyond .01. The influence of key sources upon occupational aspiration is related to interaction between race, sex, and urban configuration: cell membership is associated with frequency of citation of particular key sources beyond chance expectation. Also reported in Table 10 are totals for frequency of citation for each source for all Ss taken as a group and the associated rank order for each source. The most frequently cited source is again conversations with mother, but subjects in which S has earned his highest grades ascends from fourth place in influence upon occupational aspiration to second in influence upon occupational expectation and the reading of occupational information materials moves from fifteenth to sixth place.

Similarly, the influence of mass media moves from fifth place in occuational aspiration to eleventh in occupational expectation, and the influence of the counselor ascends from thirteenth place in occupational aspiration to tenth in occupational expectation while the influence of conversations with teachers ascends from fourteenth to eleventh.

TABLE 9: OBSERVED FREQUENCIES AND CHI SQUARE VALUE FOR SOURCE OF INFLUENCE UPON OCCUPATIONAL ASPIRATION

SUBJECT CELL CODE	ARTICLES/MAGAZINES	EXTRACURRICULAR ACTIVITIES	SUBJECTS/HIGHEST MARKS	TALK/GUIDANCE COUNSELOR	SUBJECTS/LOWEST MARKS	TALK/BUDDIES, FRIENDS	TALK/FAMILY FRIENDS	TALK/TEACHERS	TALK/RELATIVES	TALK/FATHER	TALK/MOTHER	TALK/PEOPLE IN THIS JOB	HOBBY	CLASS RELATED THIS JOB	READING OCCUPATIONAL INFO	BOOK ABOUT THIS JOB	TV, RADIO, MOVIES	OTHER SOURCE
CAPITOL CITY MALE WHITE	02	02	01	03	00	03	00	02	05	03	01	02	01	02	01	02	02	00
CAPITOL CITY FEMALE WHITE	01	01	03	01	00	03	01	02	02	01	04	04	01	02	00	02	01	03
CAPITOL CITY MALE BLACK	01	00	02	04	00	02	00	01	01	02	03	06	00	03	00	02	00	00
CAPITOL CITY FEMALE BLACK	02	00	04	02	00	02	01	02	00	00	05	00	00	03	00	02	00	00
MIDDLETOWN MALE WHITE	02	05	00	00	00	02	01	01	01	00	00	03	02	04	02	01	06	05
MIDDLETOWN FEMALE WHITE	03	00	03	02	00	03	00	01	00	00	05	04	02	03	02	00	02	02
MIDDLETOWN MALE BLACK	00	01	02	01	00	03	00	00	00	01	01	02	01	01	00	01	03	02
MIDDLETOWN FEMALE BLACK	05	00	02	00	00	04	00	04	00	00	06	04	02	01	02	00	03	02
MEGALOPOLIS MALE WHITE	01	01	00	00	00	00	00	00	02	02	01	03	00	01	01	00	02	01
MEGALOPOLIS FEMALE WHITE	02	00	00	00	00	03	00	00	01	03	05	00	02	01	03	00	02	01
MEGALOPOLIS MALE BLACK	04	02	02	00	00	01	02	01	02	03	02	03	03	01	01	01	03	04
MEGALOPOLIS FEMALE BLACK	03	04	00	01	00	06	00	02	04	02	05	02	03	01	02	01	03	02
EXURBIA MALE WHITE	02	01	03	04	00	05	00	01	00	01	00	01	01	01	01	00	02	03
EXURBIA FEMALE WHITE	02	04	10	02	00	04	02	01	04	03	05	04	03	04	03	02	01	03
EXURBIA MALE BLACK	01	01	01	00	00	00	00	01	00	00	01	01	01	00	00	00	00	00
EXURBIA FEMALE BLACK	00	01	00	00	01	00	00	00	01	00	01	00	00	01	00	00	01	00
TOTAL BY SOURCE OF INFLUENCE	29	23	33	20	01	39	07	19	21	21	44	36	22	29	18	14	31	28
RANK ORDER BY SOURCE INFLUENCE	06	09	04	13	18	02	17	14	11	11	01	03	10	06	15	16	05	08

CHI SQUARE VALUE = 358.3554, SIGNIFICANTLY DIFFERENT FROM CHANCE DISTRIBUTION AT P LEVEL BEYOND .01.

TABLE 10: OBSERVED FREQUENCIES AND CHI SQUARE VALUE FOR SOURCE OF INFLUENCE UPON OCCUPATIONAL EXPECTATION

SUBJECT CELL CODE	ARTICLES/MAGAZINES	EXTRACURRICULAR ACTIVITIES	SUBJECTS/HIGHEST MARKS	TALK/GUIDANCE COUNSELOR	SUBJECTS/LOWEST MARKS	TALK/BUDDIES, FRIENDS	TALK/FAMILY FRIENDS	TALK/TEACHERS	TALK/RELATIVES	TALK/FATHER	TALK/MOTHER	TALK/PEOPLE IN THIS JOB	HOBBY	CLASS RELATED THIS JOB	READING OCCUPATIONAL INFO	BOOK ABOUT THIS JOB	TV, RADIO, MOVIES	OTHER SOURCE
CAPITOL CITY MALE WHITE	01	00	00	01	05	04	00	01	02	04	04	04	01	03	02	01	01	00
CAPITOL CITY FEMALE WHITE	00	01	06	00	00	05	02	01	02	01	06	04	01	01	00	00	00	02
CAPITOL CITY MALE BLACK	01	03	03	02	00	03	01	00	01	01	02	06	01	02	01	00	00	00
CAPITOL CITY FEMALE BLACK	02	00	06	02	01	00	00	03	00	01	04	00	00	03	00	00	00	01
MIDDLETOWN MALE WHITE	01	03	03	01	01	01	00	03	04	03	00	05	01	03	01	02	02	03
MIDDLETOWN FEMALE WHITE	00	01	06	02	00	03	00	00	00	00	09	03	01	04	03	00	00	00
MIDDLETOWN MALE BLACK	00	01	03	00	00	01	00	01	00	01	00	03	01	01	04	01	02	01
MIDDLETOWN FEMALE BLACK	02	00	03	01	00	04	02	04	00	00	08	03	01	02	04	00	00	01
MEGALOPOLIS MALE WHITE	00	00	00	00	00	02	00	00	01	01	01	04	00	00	00	00	04	02
MEGALOPOLIS FEMALE WHITE	01	00	02	00	00	04	00	01	00	01	03	01	02	02	02	00	02	01
MEGALOPOLIS MALE BLACK	04	02	02	00	00	00	00	01	03	02	02	02	02	03	02	01	04	03
MEGALOPOLIS FEMALE BLACK	02	03	00	02	00	05	00	03	06	02	09	02	01	02	03	00	02	01
EXURBIA MALE WHITE	02	00	01	03	01	04	00	00	00	02	04	00	02	00	01	00	01	05
EXURBIA FEMALE WHITE	00	03	11	07	01	03	03	02	02	02	10	02	02	01	03	03	01	02
EXURBIA MALE BLACK	01	00	01	00	00	00	00	01	00	01	01	01	01	00	00	00	00	00
EXURBIA FEMALE BLACK	00	01	00	00	01	00	01	00	01	00	00	00	00	01	00	00	01	00
TOTAL BY SOURCE OF INFLUENCE	17	18	47	21	10	39	09	20	22	22	53	39	17	28	25	08	20	22
RANK ORDER BY SOURCE INFLUENCE	14	13	02	10	16	03	17	11	07	07	01	03	14	05	06	18	11	17

CHI SQUARE VALUE = 387.4495, SIGNIFICANTLY DIFFERENT FROM CHANCE DISTRIBUTION AT P LEVEL BEYOND .01.

7. OCCUPATIONAL MOBILITY ASPIRED TO AND EXPECTED

Social mobility is customarily measured by contrasting the socioeconomic status of a respondent with that of his parents. In this investigation the social mobility to which the subject aspires was defined as the difference between the socioeconomic status of his family and the socioeconomic status associated with the occupation to which he aspires. Operationally social (occupational) mobility aspired to was defined as the algebraic difference between the Hamburger Scale rating for the occupation aspired to and the occupation of the subject's father (Questionnaire items 22 vs. 14). The social mobility which the subject expects was defined as the difference between the socioeconomic status of his family and the socioeconomic status associated with the occupation which he expects to enter. Operationally, it was defined as the algebraic difference between the Hamburger Scale rating for the occupation expected and the occupation of the subject's father, self-reported by the subject on Questionnaire items 22 vs. 18.

Cell means and sources of variance in occupational mobility aspired to (or difference between socioeconomic status associated with the aspired occupation and current socioeconomic status) are summarized in Table 11. Significant F ratios are reported for sex (5.7996; P = .05), race (24.6335; P = .0001), urban configuration (7.2020; P = .001), and for interaction between race and urban configuration (2.6141; P = .05). Male Ss aspire to higher rates of social (occupational) mobility than female Ss. Black Ss aspire to higher rates of social mobility than white Ss. The rate of occupational mobility aspired to by Exurbia Ss is higher than that for Megalopolis Ss, which in turn is higher than that for Middletown Ss and for Capitol City Ss. *The highest rate of social mobility aspired to is observed among black females in Exurbia; the lowest among white males in Middletown.*

TABLE 12 reports cell means and sources of variance for expected social (occupational) mobility, or difference between socioeconomic status associated with the expected occupation and current socioeconomic status. Significant F ratios are reported for race (15.9793; P = .001) and for urban configuration (8.9071; P = .001). Black Ss expect higher rates of social mobility than white Ss. Exurbia Ss of either race or either sex expect higher rates of mobility than Megalopolis Ss who in turn exceed Middletown and Capitol City Ss. *For female black Ss in Capitol City, the direction of expected social mobility is negative---they expect to enter occupations at socioeconomic status levels below that of their parents. Among Capitol City Ss, whose current socioeconomic status is significantly higher than those*

TABLE 11

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: OCCUPATIONAL MOBILITY ASPIRED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	1.2308	.1351	.8485	1.3333
	BLACK	3.2857	.4000	1.5357	2.6510
FEMALE	WHITE	.8644	.5758	.0294	1.0000
	BLACK	3.5000	.1429	.2174	2.2500

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	29.96	1	5.7996	= .05
RACE	127.28	1	24.6335	= .0001
URBAN CONFIGURATION	37.21	3	7.2020	= .001
SEX BY RACE	2.25	1	.4370	≠ .05
SEX BY URBAN CONFIGURATION	4.42	3	.8560	≠ .05
RACE BY URBAN CONFIGURATION	13.50	3	2.6141	= .05
SEX BY RACE BY CONFIGURATION	3.16	3	.6118	≠ .05
ERROR: WITHIN CELLS	5.16	460		

TABLE 12

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: OCCUPATIONAL MOBILITY EXPECTED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	.6154	.8378	.3939	.6667
	BLACK	2.4286	.4500	.7143	1.9744
FEMALE	WHITE	1.4576	.3030	.0000	1.2308
	BLACK	3.1667	.1143	-.2609	2.0769

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	1.26	1	.2365	≠ .05
RACE	85.49	1	15.9793	= .001
URBAN CONFIGURATION	47.65	3	8.9071	= .0001
SEX BY RACE	.00	1	.0007	≠ .05
SEX BY URBAN CONFIGURATION	13.81	3	2.5825	≠ .05
RACE BY URBAN CONFIGURATION	10.75	3	2.0098	≠ .05
SEX BY RACE BY CONFIGURATION	3.42	3	.6397	≠ .05
ERROR: WITHIN CELLS	5.35	460		

of Ss in other urban configuration, the data reported in Tables 11 and 12 very likely reflect a levelling-off process in the middle class. Data on Ss in other urban configurations seem to represent the aspiration to enter or to exceed the middle class. The trend is pronounced among black Ss.

8. JOB ASPIRATIONS AND EXPECTATIONS IN RELATION TO MANPOWER NEEDS

In Manpower Directions: New York State 1965-1975, *the Division of Research Statistics, New York State Department of Labor, recently projected state manpower needs in each of ten occupational categories through 1975, a date at which the subjects in this study will have reached the ages of 22-23 and will, in the main, have entered the labor market full-time. To determine whether the distribution of occupational aspirations and expectations expressed by the subjects in this study accord with projected statewide manpower needs, a comparison was made between State projections and the job aspirations and expectations expressed by subjects.*

FIGURE 2 reports the occupational titles which subjects indicated as their occupational aspirations and expectations (Questionnaire items 14 and 18), along with their frequency of mention. Some 141 occupational titles are listed in Figure 2, with associated codes from the Dictionary of Occupational Titles. These codes were used as the basis for classification of occupational categories employed by the New York State Department of Labor in its report of projected manpower needs. TABLE 13 reports projected state manpower needs in 1975, in terms of thousands of workers in the labor force and in terms of the percentage of workers in the total labor force needed in each category. These percentages were used to calculate expected frequencies, which were then contrasted through Chi Square with frequencies observed in the responses of subjects when their occupational aspirations and expectations are classified similarly. The obtained Chi Square value (581.26) reaches significance well beyond P = .01. The distribution of the occupational aspirations of subjects is significantly different from projected manpower needs. *Professional and kindred and technical occupational categories are grossly over-represented in the aspirations reported by subjects; sales, operative, and labor occupations are grossly under-represented. Others are represented approximately as expected.*

TABLE 13.1 compares the distribution of expected occupations with projected state manpower needs. The resultant Chi Square value (369.5) reaches significance at .01 or beyond. The distribution of the occupational expectations of subjects is signficantly different from projected state manpower needs. *Again, professional and kindred and technical occupations are*

FIGURE 2

FREQUENCY OF OCCUPATIONAL TITLE IN JOB ASPIRATIONS AND EXPECTATIONS

D.O.T. CODE	OCCUPATIONAL TITLE	FREQUENCY/ ASPIRATION	FREQUENCY/ EXPECTATION
160.188	ACCOUNTANT	08	08
150.048	ACTOR	03	01
150.048	ACTRESS	06	01
258.358	ADVERTISING AGENT	01	01
002.081	AERONAUTICAL ENGINEER	00	01
621.281	AIRCRAFT MECHANIC	03	03
352.878	AIRLINE STEWARDESS	22	07
196.283	AIRPLANE PILOT	01	01
055.088	ARCHAEOLOGIST	03	00
001.081	ARCHITECT	04	01
149.028	ART TEACHER	04	03
141.081	ARTIST	14	06
806.887	ASSEMBLER, AUTOMOTIVE	01	02
196.283	ASTRONAUT	01	00
153.348	ATHLETE, PROFESSIONAL	20	09
355.878	ATTENDANT, CHILD CARE SCHOOL	01	00
807.381	AUTO BODY REPAIRMAN	01	02
620.281	AUTO MECHANIC	03	03
153.248	AUTO RACER	03	01
621.281	AVIATION ELECTRICIAN	01	01
151.048	BALLET DANCER	01	00
186.118	BANK PRESIDENT	01	00
212.368	BANK TELLER	00	03
330.371	BARBER	01	02
332.271	BEAUTICIAN	08	13
195.108	BLACK POWER ORGANIZER	01	00
215.388	BOOKKEEPER	04	09
182.118	BUILDING CONTRACTOR	01	00
180.	BUSINESSMAN	02	01
860.381	CARPENTER	04	05
144.081	CARTOONIST	02	02
022.081	CHEMIST	02	00
120.108	CLERGYMAN	02	00
209.588	CLERK	10	19
045.108	CLINICAL PSYCHOLOGIST	01	00
142.081	CLOTHES DESIGNER	09	04
219.388	CODING CLERK	00	02
213.382	COMPUTER OPERATOR	33	37
860.381	CONSTRUCTION WORKER	06	08
372.868	CORRECTIONAL OFFICER	01	01
202.388	COURT STENOGRAPHER	06	00
099.108	DEAN, GIRLS' SCHOOL	01	00

FIGURE 2/CONTINUED

D.O.T. CODE	OCCUPATIONAL TITLE	ASPIRATION	EXPECTATION
899.281	DEEP SEA DIVER	01	00
079.368	DENTAL ASSISTANT	01	00
078.368	DENTAL HYGIENIST	00	02
017.281	DESIGN DRAFTSMAN	01	00
375.268	DETECTIVE	02	01
077.168	DIETITICIAN	01	00
070.108	DOCTOR, MEDICAL	13	11
017.281	DRAFTSMAN	01	04
824.281	ELECTRICIAN	00	08
003.081	ELECTRONIC ENGINEER	08	00
092.228	ELEMENTARY TEACHER	01	02
005.081	ENGINEER	07	02
152.048	ENTERTAINER	00	01
180.	EXECUTIVE	03	00
169.168	EXECUTIVE SECRETARY	00	02
070.228	FACULTY PROFESSOR	07	01
375.168	FBI AGENT	03	02
206.388	FILE CLERK	02	05
040.081	FOREST RANGER	02	00
187.168	FUNERAL DIRECTOR	00	02
379.168	GAME WARDEN	02	01
188.118	GENERAL, USAF	01	00
209.588	GENERAL CLERK	00	01
575.781	GLASSBLOWER	01	00
290.877	GROCERYMAN	01	01
045.108	GUIDANCE COUNSELOR	00	01
859.883	HEAVY EQUIPMENT OPERATOR	00	02
355.878	HOSPITAL WORKER	00	01
	HOUSEWIFE	00	14
078.368	HYGIENIST	01	00
183.168	IBM SUPERVISOR	01	01
341.368	INSTRUCTOR AIDE	00	01
250.258	INSURANCE SALESMAN	00	01
142.051	INTERIOR DECORATOR	02	00
381.887	JANITOR	00	02
132.368	JOURNALIST	02	03
111.108	JUDGE	01	00
213.582	KEYPUNCH OPERATOR	09	09
359.879	KINDERGARTEN TEACHER	00	01
078.281	LAB TECHNICIAN	01	01
110.108	LAWYER	09	08
600.280	MACHINIST	01	01
231.588	MAIL CLERK	01	01
233.388	MAILMAN	02	02

FIGURE 2/CONTINUED

D.O.T. CODE	OCCUPATIONAL TITLE	ASPIRATION	EXPECTATION
169.168	MANAGER, DATA PROCESSING	01	02
020.088	MATHEMATICIAN	01	00
334.878	MASSEUSE	01	00
620.281	MECHANIC	02	02
911.844	MERCHANT MARINE	02	02
378.999	MILITARY SERVICE	03	05
297.868	MODEL	10	06
	MOTHER	00	01
9.9.883	MOTORMAN, TRANSIT AUTHORITY	01	01
280.358	MOTORCYCLE SALESMAN	01	00
152.028	MUSIC TEACHER	02	02
152.048	MUSICIAN	05	04
359.879	NURSERY SCHOOL TEACHER	03	02
209.588	OFFICE CLERK	05	15
079.108	OPTOMETRIST	01	01
072.108	ORTHODONTIST	01	01
153.228	PHYSICAL EDUCATION TEACHER	05	03
195.108	PEACE CORPSMAN	01	01
.	PHILANTHROPIST	01	00
	PHILOSOPHER	01	00
143.382	PHOTOGRAPHER	05	03
079.378	PHYSICAL THERAPIST	03	01
375.884	POLICEMAN	10	15
232.368	POST OFFICE CLERK	00	01
079.378	PRACTICAL NURSE	03	05
188.118	PRESIDENT	07	00
219.388	PROGRAMMER, COMPUTER	01	00
070.108	PSYCHIATRIST	02	00
045.088	PSYCHOLOGIST	03	01
188.118	PUBLIC ADMINISTRATOR	01	00
237.368	RECEPTIONIST	03	02
637.281	REFRIGERATION MECHANIC	01	00
075.378	REGISTERED NURSE	29	22
153.228	RIDING INSTRUCTOR	01	00
290.877	SALES CLERK	01	04
289.358	SALESMAN, RETAIL	04	02
909.883	SANITATION MAN	02	02
201.368	SECRETARY	57	81
377.868	SHERIFF	01	00
195.108	SOCIAL WORKER	13	08
202.388	STENOGRAPHER	00	07
861.781	STONE MASON	00	03
185.168	STORE MANAGER	02	03

FIGURE 2/CONTINUED

D.O.T CODE	OCCUPATIONAL TITLE	ASPIRATION	EXPECTATION
801.781	STRUCTURAL STEEL WORKER	00	01
091.228	TEACHER	22	27
235.862	TELEPHONE OPERATOR	00	01
203.138	TELETYPIST	00	01
159.169	TELEVISION DIRECTOR	01	00
211.468	TOLL COLLECTOR	00	01
737.228	TRANSLATOR	02	00
905.883	TRUCK DRIVER	03	04
720.281	TV REPAIRMAN	01	01
202.588	TYPIST	02	06
356.874	VETERINARY ASSISTANT	00	01
819.381	WELDER	00	01
078.368	X-RAY TECHNICIAN	00	01
	UNCERTAIN OR NO RESPONSE	03	13

grossly over-represented in the occupational expectations reported by Ss; clerical occupations, distributed in congruence with state projections in the distribution of occupational aspirations, are over-represented in the distribution of occupational expectations; sales, craft, operative and labor occupations are grossly under-represented. When the traditional sources of workers in these categories are considered, the differences become even more striking.

TABLE 13

OCCUPATIONAL ASPIRATIONS IN RELATION TO PROJECTED STATE MANPOWER NEEDS

OCCUPATIONAL CATEGORY	PROJECTED STATE NEEDS (1975) 1000's WORKERS	% LABOR FORCE	FREQUENCY OBSERVED
PROFESSIONAL & KINDRED	1137.3	13.24	225
TECHNICAL	258.4	3.00	41
MANAGERIAL	781.8	9.10	23
CLERICAL	1829.9	21.30	102
SALES	626.7	7.29	07
CRAFTSMEN	1082.5	12.60	23
OPERATIVES	1319.0	15.15	09
SERVICE	1198.4	13.95	58
LABORERS & FARM LABORERS	345.9	4.02	00

CHI SQUARE = 581.26: OBSERVED FREQUENCY SIGNIFICANTLY DIFFERENT FROM STATE PROJECTIONS AT P LEVEL BEYOND .01.

TABLE 13.1

OCCUPATIONAL EXPECTATIONS IN RELATION TO PROJECTED STATE MANPOWER NEEDS

OCCUPATIONAL CATEGORY	PROJECTED STATE NEEDS (1975) 1000's WORKERS	% LABOR FORCE	FREQUENCY OBSERVED
PROFESSIONAL & KINDRED	1137.3	13.24	155
TECHNICAL	258.4	3.00	47
MANAGERIAL	781.8	9.10	13
CLERICAL	1829.9	21.30	183
SALES	626.7	7.29	09
CRAFTSMEN	1082.5	12.60	37
OPERATIVES	1319.0	15.15	13
SERVICE	1198.4	13.95	61
LABORERS & FARM LABORERS	345.9	4.02	00

CHI SQUARE = 369.55: OBSERVED FREQUENCY SIGNIFICANTLY DIFFERENT FROM STATE PROJECTIONS AT P LEVEL = .01.

9. ENTREPRENEURIAL ASPIRATION AND EXPECTATION

Subjects were asked to indicate whether they would like to own their own business and whether they expected to own their own business (Questionnaire items 65 and 66). A YES response to the first question is regarded as evidence of entrepreneurial aspiration, while a YES response to the second question is regarded as evidence of entrepreneurial expectation. Table 14 reports frequencies observed and frequencies expected by chance for both entrepreneurial aspiration and entrepreneurial expectation, classified according to interactive subsets representing urban configuration, race, and sex, along with associated Chi Square values. The obtained Chi Square for enterpreneurial aspiration (61.50) reaches significance beyond .01: Entrepreneurial aspiration is differentially associated with interaction between race, sex, and urban configuration. The obtained Chi Square for entrepreneurial expectation (33.90) reaches significance at .01: Entrepreneurial expectation is differentially associated with interaction between race, sex, and urban configuration. In general, more subjects respond YES to the entrepreneurial aspiration item than chance would predict, while more subjects respond NO to the entrepreneurial expectation item than chance would predict. But no clear pattern emerges as to race or sex.

10. SEMANTIC MEANING OF SELF AND OCCUPATIONAL ROLES

The psychological "meanings" of self and of the occupations aspired to and expected were measured through administration of a semantic differential schedule containing nine factor-pure bipolar adjective scales under differential sets of instructions. The following pairs of adjectives were employed: good-bad, large-small, alive-dead, fast-slow, valuable-worthless, hard-soft, strong-weak, clean-dirty, beautiful-ugly. Subjects were to rank each concept measured on a seven point scale for each adjectival pair. The positive pole in each case is scored at 7, the negative at 1.

Subjects were asked to rate the semantic concept YOURSELF (Questionnaire items 119 through 127) to obtain a measure of the semantic meaning

TABLE 14

OBSERVED AND EXPECTED FREQUENCIES AND CHI SQUARE VALUES: ENTREPRENEURIAL ASPIRATION AND ENTREPRENEURIAL EXPECTATION

SUBJECT CELL CODE	ASPIRATION YES	ASPIRATION NO	EXPECTATION YES	EXPECTATION NO
EXURBIA MALE WHITE	15[a]	11	07	19
	15[b]	10	06	19
MIDDLETOWN MALE WHITE	31	06	14	23
	22	14	09	27
CAPITOL CITY MALE WHITE	26	07	09	24
	22	15	09	28
MEGALOPOLIS MALE WHITE	12	06	05	13
	10	08	04	13
EXURBIA MALE BLACK	07	00	02	05
	04	02	01	05
MIDDLETOWN MALE BLACK	16	04	09	11
	12	07	05	14
CAPITOL CITY MALE BLACK	19	09	10	18
	16	11	07	20
MEGALOPOLIS MALE BLACK	26	09	17	22
	23	15	10	28
EXURBIA FEMALE WHITE	19	40	05	53
	35	23	15	43
MIDDLETOWN FEMALE WHITE	18	15	04	29
	19	13	08	24
CAPITOL CITY FEMALE WHITE	16	18	03	31
	20	13	08	25
MEGALOPOLIS FEMALE WHITE	23	03	07	19
	15	10	06	19
EXURBIA FEMALE BLACK	02	04	02	04
	03	02	01	04
MIDDLETOWN FEMALE BLACK	20	15	09	26
	21	13	09	25
CAPITOL CITY FEMALE BLACK	10	13	03	20
	13	09	06	17
MEGALOPOLIS FEMALE BLACK	27	25	17	34
	31	20	13	38
CHI SQUARE VALUE	61.50		33.90	
PROBABILITY LEVEL	= .01		= .01	

[a] FIRST PAIR OF DIGITS PER CELL = OBSERVED FREQUENCY. [b] SECOND PAIR OF DIGITS PER CELL = FREQUENCY EXPECTED BY CHANCE.

TABLE 15

SUMMARY OF CELL MEANS AND SOURCE OF VARIANCE: SEMANTIC MEANING/SELF

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	21.9615	20.3514	22.7273	20.3889
	BLACK	14.8571	20.4500	17.3214	18.6923
FEMALE	WHITE	23.6949	24.6364	25.3824	23.0385
	BLACK	17.1667	23.1429	22.2609	21.5577

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	747.246	1	18.1508	= .0001
RACE	917.777	1	22.2762	= .00001
URBAN CONFIGURATION	126.703	3	3.0753	= .05
SEX BY RACE	2.832	1	.0687	≠ .05
SEX BY URBAN CONFIGURATION	12.946	3	.3142	≠ .05
RACE BY URBAN CONFIGURATION	157.460	3	3.8210	= .01
SEX BY RACE BY CONFIGURATION	12.980	3	.3150	≠ .05
RESIDUAL: WITHIN CELLS	41.200	460		

TABLE 16

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SEMANTIC MEANING/JOB ASPIRED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	20.5769	19.0811	22.3634	20.0556
	BLACK	18.5714	21.1500	21.7857	19.5641
FEMALE	WHITE	23.3898	20.4848	22.2941	19.3077
	BLACK	19.3333	21.1429	21.3913	21.0192

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	34.564	1	.8286	≠ .05
RACE	16.607	1	.3940	≠ .05
URBAN CONFIGURATION	60.303	3	1.4305	≠ .05
SEX BY RACE	3.220	1	.0764	≠ .05
SEX BY URBAN CONFIGURATION	14.805	3	.3512	≠ .05
RACE BY URBAN CONFIGURATION	76.429	3	1.8130	≠ .05
SEX BY RACE BY CONFIGURATION	18.031	3	.4277	≠ .05
RESIDUAL: WITHIN CELLS	42.155	460		

of self, the concept A PERSON EMPLOYED IN THE JOB YOU WOULD LIKE TO HAVE (Questionnaire items 101 through 109) to obtain a measure of the semantic meaning of the aspired to occupation, and the concept A PERSON EMPLOYED IN THE JOB YOU EXPECT TO HAVE (Questionnaire items 110 through 118) to obtain a measure of the semantic meaning of the expected occupation. Summative ratings were computed for each concept.

TABLE 15 reports cell means and sources of variance for the semantic meaning of self, along with associated F ratios. Significant F ratios are observed for sex (18.1508; P = .0001), for race (22.2762; P = .00001), and for the second order interaction between race, sex, and urban configuration (3.8210; P = .01). Female Ss perceive themselves more positively than males and white Ss perceive themselves more positively than blacks. The highest cell mean is observed among white females in Capitol City (who also belong to significantly higher socioeconomic status families), while the lowest cell mean is observed among black males in Exurbia. These findings accord with those of previous studies relative to the negative self-concept of black youth.

Cell means and sources of variance for the semantic meaning of the aspired to occupation are reported in TABLE 16. F ratios are found to be significant for none of the sources of variance extracted. Hence, it is to be concluded that race, sex, and urban configuration fail to influence the semantic meaning of the aspired to occupation, either in isolation or in interaction with each other. However, it is interesting to observe that, except in two cells (male and female blacks in Middletown), the absolute values reported for the semantic meaning of the aspired to occupation tend to slightly exceed the corresponding values for the meaning of self.

TABLE 17 reports cell means, sources of variance, and F ratios for the semantic meaning of the job expected. The F ratio for urban configuration (4.1332) reaches significance at .01 and the F ratio for interaction between sex, race, and urban configuration (2.6059) reaches significance at .05. Capitol City Ss view their expected occupations most positively, Megalopolis Ss least positively. The highest cell mean is observed among white males in Capitol City, the lowest among blacks in Megalopolis.

11. FUTURE TIME PERSPECTIVE

Time extension, or the extent to which one can project himself into a set of realistic future events, is regarded as the single most important or

TABLE 17

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SEMANTIC MEANING/JOB EXPECTED

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	22.1154	20.4865	23.9091	20.3889
	BLACK	21.8571	21.0000	22.1786	16.2564
FEMALE	WHITE	22.6780	20.8788	23.0000	17.2308
	BLACK	17.8333	21.2857	21.1304	20.7885

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	14.551	1	.2833	≠ .05
RACE	89.697	1	1.7463	≠ .05
URBAN CONFIGURATION	212.248	3	4.1322	= .01
SEX BY RACE	10.409	1	.2044	≠ .05
SEX BY URBAN CONFIGURATION	26.244	3	.5109	≠ .05
RACE BY URBAN CONFIGURATION	38.901	3	.7574	≠ .05
SEX BY RACE BY CONFIGURATION	133.843	3	2.6059	= .05
RESIDUAL: WITHIN CELLS	51.364	460		

TABLE 18

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: FUTURE TIME PERSPECTIVE

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	9.3845	8.8378	10.6061	9.0556
	BLACK	9.8571	9.1500	8.8571	9.0000
FEMALE	WHITE	7.0339	5.2424	7.2647	6.6154
	BLACK	11.8333	6.5429	6.1739	7.7500

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	349.885	1	6.8379	= .01
RACE	33.719	1	.6764	≠ .05
URBAN CONFIGURATION	62.407	3	1.2536	≠ .05
SEX BY RACE	65.005	1	1.3220	≠ .05
SEX BY URBAN CONFIGURATION	37.962	3	.7615	≠ .05
RACE BY URBAN CONFIGURATION	56.610	3	1.1356	≠ .05
RACE BY SEX BY CONFIGURATION	14.931	3	.2995	≠ .05
RESIDUAL: WITHIN CELLS	49.853	460		

perhaps the decisive component in one's future time perspective. It is to be anticipated that the extent of future time projection will be greater among those youth who aspire to and who expect to enter occupations for which post-secondary training or college education is needed. In the present investigation, subjects were asked to list five events which they expected to happen to them within their lives and to indicate the age they expected to be when each event occurred (Questionnaire items 76 through 80). The ages corresponding to each event were summed and meaned; the subject's current age was subtracted from the mean age thus computed and the remainder regarded as an operational approximation to future time perspective. TABLE 18 reports cell means and sources of variance. Only the F ratio for sex (6.8379; P = .01) reaches significance: Male Ss have "longer" future time perspectives than females. This finding tends to concur with the results reported in Table 4, which indicate that male subjects aspire to higher occupational status levels than female subjects.

12. WORK VALUES

Super's Work Values Inventory is a standard, normative measure of each of 15 sources of satisfaction or reward associated with work. Raw scores on each work value were arrayed according to sex, urban configuration, and race. Cell means and F ratios are presented in Tables 19 through 33. There are observed no significant F ratios on nine of the 15 values: Intellectual Stimulation (TABLE 19), Economic Returns (TABLE 22), ALTRUISM (Table 23), a finding which contrasts with the normative data reported by Hendrix and Super (1968) that places females higher than males, Creativity (TABLE 24), Associations (TABLE 25), Security (TABLE 26), Management (TABLE 28), Variety (TABLE 29), and Aesthetics (TABLE 30).

However, significant F ratios are reported for six of the 15 work values. TABLE 19 reports a significant F ratio (3.6163; P = .05) for urban configuration on Achievement as a work value: Elmira Ss are highest, Megalopolis Ss are lowest. Significant F ratios are reported in Table 21 on Way of Life as a work value for sex (4.0599; P = .05) and for urban configuration (4.4303; P = .01). Middletown Ss score highest, Megalopolis Ss lowest, on Way of Life; females score higher than males.

TABLE 27 reports a significant F ratio for race (4.1307; P = .05) on Prestige: Blacks value prestige more highly than do whites. TABLE 31 also reports a significant F ratio for sex on Independence (7.9294; P = .01)--Males value independence more than females. Three sources of variance reach significance, as reported in Table 32, for Supervisory Relations: F ratios

TABLE 19

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: INTELLECTUAL STIMULATION

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	11.2692	12.1081	11.4242	10.7778
	BLACK	10.0000	11.8000	11.6429	11.2308
FEMALE	WHITE	11.0847	12.1818	11.0294	10.9615
	BLACK	12.0000	11.7429	10.6087	11.2692

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	.502	1	.0828	≠ .05
RACE	.378	1	.0624	≠ .05
URBAN CONFIGURATION	15.048	3	2.4826	≠ .05
SEX BY RACE	2.069	1	.3413	≠ .05
SEX BY URBAN CONFIGURATION	9.059	3	1.4945	≠ .05
RACE BY URBAN CONFIGURATION	2.105	3	.3473	≠ .05
SEX BY RACE BY CONFIGURATION	8.247	3	1.3606	≠ .05
RESIDUAL: WITHIN CELLL	6.061	460		

TABLE 20

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: ACHIEVEMENT

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	12.1923	13.9189	12.3636	12.3889
	BLACK	12.8571	13.7500	12.7857	12.9231
FEMALE	WHITE	12.9322	14.2121	13.5000	12.6538
	BLACK	13.5000	13.6857	13.1304	13.3462

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	18.358	1	3.1349	≠ .05
RACE	4.237	1	.7235	≠ .05
URBAN CONFIGURATION	21.178	3	3.6163	= .05
SEX BY RACE	1.521	1	.2597	≠ .05
SEX BY URBAN CONFIGURATION	1.811	3	.3093	≠ .05
RACE BY URBAN CONFIGURATION	4.508	3	.7852	≠ .05
SEX BY RACE BY CONFIGURATION	.844	3	.1441	≠ .05
RESIDUAL: WITHIN CELLS	4.856	460		

TABLE 21

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: WAY OF LIFE

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	13.1538	13.8649	12.8182	12.1667
	BLACK	13.0000	13.6500	13.2143	12.7179
FEMALE	WHITE	13.5763	14.9697	13.8529	12.4615
	BLACK	14.0000	14.0000	13.0870	13.2692

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	27.540	1	4.0599	= .05
RACE	.006	1	.0009	≠ .05
URBAN CONFIGURATION	30.053	3	4.4303	= .01
SEX BY RACE	1.508	1	.2223	≠ .05
SEX BY URBAN CONFIGURATION	.545	3	.0803	≠ .05
RACE BY URBAN CONFIGURATION	5.922	3	.8730	≠ .05
SEX BY RACE BY CONFIGURATION	3.469	3	.5114	≠ .05
RESIDUAL: WITHIN CELLS	6.784	460		

TABLE 22

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: ECONOMIC RETURNS

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	13.0385	14.9730	11.3994	12.9444
	BLACK	14.0000	13.6500	13.4286	13.9784
FEMALE	WHITE	12.4746	13.0303	12.3824	12.3846
	BLACK	11.1667	13.2857	13.3478	13.7308

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	47.295	1	2.5786	≠ .05
RACE	14.326	1	.7810	≠ .05
URBAN CONFIGURATION	19.538	3	1.0653	≠ .05
SEX BY RACE	.867	1	.0473	≠ .05
SEX BY URBAN CONFIGURATION	14.240	3	.7754	≠ .05
RACE BY URBAN CONFIGURATION	16.751	3	.9133	≠ .05
SEX BY RACE BY CONFIGURATION	13.531	3	.7737	≠ .05
RESIDUAL: WITHIN CELLS	18.341	460		

TABLE 23

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: ALTRUISM

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	11.3462	13.2973	11.6061	11.3889
	BLACK	11.7143	12.9500	12.2500	12.2051
FEMALE	WHITE	12.3728	12.6667	12.5882	12.0000
	BLACK	13.3333	12.3714	12.0870	12.4423

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	12.375	1	1.4395	≠ .05
RACE	5.506	1	.6508	≠ .05
URBAN CONFIGURATION	10.840	3	1.2607	≠ .05
SEX BY RACE	.083	1	.1143	≠ .05
SEX BY URBAN CONFIGURATION	12.747	3	1.4825	≠ .05
RACE BY URBAN CONFIGURATION	4.611	3	.5363	≠ .05
SEX BY RACE BY CONFIGURATION	2.763	3	.3212	≠ .05
RESIDUAL: WITHIN CELLS	8.508	460		

TABLE 24

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: CREATIVITY

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	10.7308	10.5405	11.4545	10.7778
	BLACK	9.5714	11.6000	11.6071	11.4615
FEMALE	WHITE	10.5932	12.0303	11.1176	11.0000
	BLACK	11.6667	11.6000	12.0000	11.3462

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	16.740	1	2.1012	≠ .05
RACE	8.737	1	1.0964	≠ .05
URBAN CONFIGURATION	13.523	3	1.6974	≠ .05
SEX BY RACE	1.655	1	.2077	≠ .05
SEX BY URBAN CONFIGURATION	4.808	3	.6035	≠ .05
RACE BY URBAN CONFIGURATION	1.429	3	.1793	≠ .05
SEX BY RACE BY CONFIGURATION	12.893	3	1.6183	≠ .05
RESIDUAL: WITHIN CELLS	7.967	460		

TABLE 25

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: ASSOCIATIONS

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	10.6154	10.6216	10.9091	10.7778
	BLACK	9.5714	10.5000	10.2143	11.1282
FEMALE	WHITE	10.9831	10.8788	10.9706	10.5385
	BLACK	10.3333	10.9143	10.3043	11.3462

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	4.789	1	.8026	≠ .05
RACE	5.048	1	.8459	≠ .05
URBAN CONFIGURATION	4.708	3	.7890	≠ .05
SEX BY RACE	1.383	1	.2318	≠ .05
SEX BY URBAN CONFIGURATION	1.401	3	.2347	≠ .05
RACE BY URBAN CONFIGURATION	8.711	3	1.4597	≠ .05
SEX BY RACE BY CONFIGURATION	.207	3	.0346	≠ .05
RESIDUAL: WITHIN CELLS	5.068	460		

TABLE 26

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SECURITY

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	13.3077	12.9459	12.5122	12.4444
	BLACK	12.7143	14.0500	13.2500	12.4359
FEMALE	WHITE	12.5763	12.7879	13.0882	13.0769
	BLACK	12.0000	14.1143	12.9665	12.8269

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	.070	1	.0111	≠ .05
RACE	3.309	1	.5259	≠ .05
URBAN CONFIGURATION	11.773	3	1.8715	≠ .05
SEX BY RACE	.971	1	.1544	≠ .05
SEX BY URBAN CONFIGURATION	4.509	3	.8741	≠ .05
RACE BY URBAN CONFIGURATION	12.093	3	1.9233	≠ .05
SEX BY RACE BY CONFIGURATION	1.147	3	.1823	≠ .05
RESIDUAL: WITHIN CELLS	6.291	460		

TABLE 27

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: PRESTIGE

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	11.1154	11.7568	11.3333	11.8889
	BLACK	11.8571	12.0500	11.8929	12.3846
FEMALE	WHITE	11.9831	11.9697	11.0000	11.5769
	BLACK	12.1667	12.6000	11.7391	12.4808

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	1.966	1	.3058	≠ .05
RACE	26.555	1	4.1307	= .05
URBAN CONFIGURATION	6.758	3	1.0512	≠ .05
SEX BY RACE	.174	1	.0269	≠ .05
SEX BY URBAN CONFIGURATION	3.201	3	.4978	≠ .05
RACE BY URBAN CONFIGURATION	.318	3	.0494	≠ .05
SEX BY RACE BY CONFIGURATION	1.010	3	.1572	≠ .05
RESIDUAL: WITHIN CELLS	6.429	460		

TABLE 28

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: MANAGEMENT

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	10.3077	8.8108	9.1515	10.0556
	BLACK	10.4286	10.1000	10.0714	10.3846
FEMALE	WHITE	9.6441	11.9091	8.3529	9.4231
	BLACK	10.3333	10.1714	9.9910	10.2885

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	.675	1	.0332	≠ .05
RACE	20.921	1	1.0282	≠ .05
URBAN CONFIGURATION	13.209	3	.6491	≠ .05
SEX BY RACE	2.112	1	.1038	≠ .05
SEX BY URBAN CONFIGURATION	20.443	3	1.0047	≠ .05
RACE BY URBAN CONFIGURATION	7.470	3	.3671	≠ .05
SEX BY RACE BY CONFIGURATION	16.732	3	.8223	≠ .05
RESIDUAL: WITHIN CELLS	20.348	460		

TABLE 29

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: VARIETY

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	10.1538	10.3423	10.5152	9.7222
	BLACK	11.0000	10.4000	10.7143	11.3846
FEMALE	WHITE	10.9322	10.8448	10.3529	10.4231
	BLACK	9.5000	11.5429	11.2174	11.2500

SOURCE	MEAN SQ	D.F	F RATIO	P LEVEL
SEX	2.846	1	.4331	≠ .05
RACE	21.594	1	3.2859	≠ .05
URBAN CONFIGURATION	1.824	3	.2776	≠ .05
SEX BY RACE	2.762	1	.4203	≠ .05
SEX BY URBAN CONFIGURATION	3.600	3	.5478	≠ .05
RACE BY URBAN CONFIGURATION	8.139	3	1.2385	≠ .05
SEX BY RACE BY CONFIGURATION	11.574	3	1.7612	≠ .05
RESIDUAL: WITHIN CELLS	6.572	460		

TABLE 30

SUMMARY OF CELL MEANS AND SOURCE OF VARIANCE: AESTHETICS

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	7.4231	9.7568	9.2424	9.1667
	BLACK	7.8571	8.4500	9.7500	10.1282
FEMALE	WHITE	8.7458	9.9091	9.0882	9.0000
	BLACK	8.0000	8.7714	10.2609	9.5192

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	2.968	1	.1647	≠ .05
RACE	.210	1	.0116	≠ .05
URBAN CONFIGURATION	42.927	3	2.3816	≠ .05
SEX BY RACE	.799	1	.0443	≠ .05
SEX BY URBAN CONFIGURATION	4.321	3	.2397	≠ .05
RACE BY URBAN CONFIGURATION	18.917	3	1.0495	≠ .05
SEX BY RACE BY CONFIGURATION	3.259	3	.1808	≠ .05
RESIDUAL: WITHIN CELLS	18.025	460		

TABLE 31

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: INDEPENDENCE

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	11.5000	12.3514	11.3333	11.5556
	BLACK	12.4286	12.0500	12.3571	11.8205
FEMALE	WHITE	10.6441	11.4545	10.0000	10.8846
	BLACK	11.1667	11.6286	10.5652	11.5577

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	72.147	1	7.9294	= .01
RACE	19.044	1	2.0931	≠ .05
URBAN CONFIGURATION	8.045	3	.0832	≠ .05
SEX BY RACE	.003	1	.0003	≠ .05
SEX BY URBAN CONFIGURATION	4.826	3	.5304	≠ .05
RACE BY URBAN CONFIGURATION	3.116	3	.3425	≠ .05
SEX BY RACE BY CONFIGURATION	1.314	3	.1444	≠ .05
RESIDUAL: WITHIN CELLS	9.099	460		

TABLE 32

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SUPERVISORY RELATIONS

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	12.2033	12.1459	12.0081	12.3835
	BLACK	10.4082	13.0727	12.5473	12.5865
FEMALE	WHITE	12.3377	12.2187	12.2193	12.3312
	BLACK	10.2738	13.0000	12.3362	12.6378

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	.080	1	.0124	≠ .05
RACE	3.791	1	.5842	≠ .05
URBAN CONFIGURATION	28.782	3	4.4347	= .01
SEX BY RACE	3.250	1	.5023	≠ .05
SEX BY URBAN CONFIGURATION	30.206	3	4.6541	= .01
RACE BY URBAN CONFIGURATION	32.832	3	5.0587	= .01
SEX BY RACE BY CONFIGURATION	7.611	3	1.1726	≠ .05
RESIDUAL: WITHIN CELLS	6.490	460		

TABLE 33

SUMMARY OF CELL MEANS AND SOURCES OF VARIANCE: SURROUNDINGS

		EXURBIA	MIDDLETOWN	CAPITOL CITY	MEGALOPOLIS
MALE	WHITE	12.3846	11.7568	11.3333	11.2778
	BLACK	11.8571	12.6000	11.5357	12.1282
FEMALE	WHITE	12.9492	13.3939	12.5882	11.9615
	BLACK	12.6667	13.0571	12.9565	12.4615

SOURCE	MEAN SQ	D.F.	F RATIO	P LEVEL
SEX	65.863	1	10.4260	= .001
RACE	3.361	1	.5321	≠ .05
URBAN CONFIGURATION	9.440	3	1.4943	≠ .05
SEX BY RACE	1.609	1	.2547	≠ .05
SEX BY URBAN CONFIGURATION	2.821	3	.4465	≠ .05
RACE BY URBAN CONFIGURATION	4.123	3	.6526	≠ .05
SEX BY RACE BY CONFIGURATION	2.208	3	.3496	≠ .05
RESIDUAL: WITHIN CELLS	6.317	460		

TABLE 34

COEFFICIENTS OF CORRELATION BETWEEN WORK VALUES AND SEMANTIC MEANING/SELF

WORK VALUE	COEFFICIENT	P LEVEL
INTELLECTUAL STIMULATION	-.09609	= .05
ACHIEVEMENT	.03260	≠ .05
WAY OF LIFE	.04708	≠ .05
ECONOMIC RETURNS	-.02895	≠ .05
ALTRUISM	-.07120	≠ .05
CREATIVITY	-.10779	= .05
ASSOCIATIONS	-.13836	= .01
SECURITY	.01673	≠ .05
PRESTIGE	-.10394	= .05
MANAGEMENT	-.16171	= .01
AESTHETICS	-.07043	≠ .05
VARIETY	-.05133	≠ .05
INDEPENDENCE	-.14618	= .01
SUPERVISORY RELATIONS	.04000	≠ .05
SURROUNDINGS	.06871	≠ .05

for urban configuration (4.4357, at .01), for interaction between race and urban configuration (4.6541, at .01), and for the second order interaction effect between sex, race, and configuration (5.0587, at .01). TABLE 33 reports and F ratio for sex signficant at .001 for Surroundings as a work value.

Coefficients of correlation between the measure of semantic meaning of self and each of the 15 values measured by Super's instrument are reported in TABLE 34. All Ss for whom these data were available were utilized; hence N = 531 in this case. Significant negative relationships are reported between the semantic meaning of self and Intellectual Stimulation (P = .05), Creativity (.05), Associations (.01), Prestige (.05), Management (.01), and Independence (.01). None of the 15 scales appears positively related to the semantic meaning of self. Even though these negative correlations reach a difference from zero which is significant at .05 or .01, none represents a substantial contribution to common variance. Nontheless, the consistently negative pattern of relationship is rather intriguing from a theoretical perspective. The general trend appears to be that the more positive the semantic meaning of self, the less the value placed upon intellectual stimulation, creativity, associations, prestige, management, and independence in work situations. Conversely, the less positively the self is perceived the greater the value placed on these dimensions. One might speculate that, at least among the lower and lower middle class youth principally represented in this investigation, the job content and its context are apt to be seen as ways of extending or enhancing a self viewed somewhat negatively.

13. INTERRELATIONSHIPS AMONG PRINCIPAL VARIABLES

TABLE 35, the final entry in a report that almost surfeits from a banquet of tables, represents an omnibus correlation matrix relating the variables of principal interest in this investigation to all "hard" variables derived from the SRA Non-Verbal Examination, the Super Work Values Inventory, and the Questionnaire devised for use in this study, which itself incorporates a modified version of the Heimberg Future Time Perspective Index and the investigators' form of Murov's Index of Occupation Knowledge. Variables derived from the Questionnaire which are represented in Table 35 include the subject's age (Questionnaire item 3); the total number of his brothers (item 7), the number of brothers older (item 8) and younger (item 9); the total number of his sisters (item 10), the number of his sisters older (item 11) and younger (item 12); socioeconomic status associated with the job to which the subject aspires, derived from application of the Hamburger Scale to the subject's response to item 14; socioeconomic status as-

sociated with the job which the subject expects to enter, represented by the Hamburger Scale value corresponding to the subject's response to item 18; socioeconomic status of the subject's father's job (Hamburger Scale applied to item 22), of his mother's job (Hamburger Scale applied to 24) and of his paternal grandfather's job (Scale value for item 25): the subject's estimate of the annual income he will need to support the life style he projects for himself (response to item 67); the subject's future time perspective, derivation of which has already been described; the subject's estimate of the typical current income of persons now employed in the jobs to which he aspires and which he expects to enter (item 89 through 100s); the semantic meaning of self, of the aspired to occupation, and of the expected occupation, derivation of which has already been described; the extent of congruence between semantic meaning of self and semantic meaning of the aspired to occupation, determined by subtracting the value of the latter from the value of the former, and of congruence between the semantic meanings of self and expected occupation and aspired to and expected occupations, similarly derived; the subject's knowledge of his aspired to and expected occupations, the social mobility to which he aspires and which he expects, and his enterpreneurial aspiration and expectation, which represent the variables of principal interest in this investigation and the derivation of which has already been described. The "hard" (continuously measured) variables were complemented by an abundance of "soft" or dichotomous-nominal variables relating to social and occupational back drop data which are not reflected in Table 35.

To achieve some consistency in statistically treating the data represented in Table 35, the criterion variables entrepreneurial aspiration and entrepreneurial expectation, though "soft" and nominal, were treated as if they were continuous. Affirmative responses were coded at 2, negative responses at 1. Even though this procedure yields minimal estimates of relationship, product moment coefficients were computed for entrepreneurial aspiration and expectation thus coded. Correlations were computed on all available cases; hence N's range from 476 to 531 for the coefficients reviewed in Table 35.

ENTREPRENEURIAL ASPIRATION: Inspection of Table 35 reveals positive correlations significantly different from zero at .05 for (1) the number or brothers reported by the subject; (2) the subject's estimate of the annual income he will need to support the life style he anticipates; (3) congruence between the semantic meaning of the job aspired to and the job expected; and (4) Prestige as a work value. Positive correlations significant at .01 are reported between entrepreneurial aspiration and (1) future time perspective; (2) the subject's estimate of the typical income earned currently by persons employed in the job to which the subject aspires; (3) entrepreneurial aspiration; and (4) Creativity, Independence, and Variety as work values. A negative relationship significant at .05 is reported between entrepreneurial aspiration and the semantic meaning of self; a negative relationship significant at .01 is reported for the semantic meaning of the occupation which the subject expects to enter. The most substantial correl-

TABLE 35

COEFFICIENTS OF CORRELATION BETWEEN FOCAL VARIABLES AND OTHER "HARD" VARIABLES STUDIED

	ENTREPRENEURIAL		OCCUPATIONAL KNOWLEDGE		OCCUPATIONAL MOBILITY	
PREDICTOR VARIABLE	ASPIRE	EXPECT	ASPIRED	EXPECTED	ASPIRED	EXPECTED
SUBJECT'S AGE	-.0622	.0018	.0282	-.0547	.0288	.0043
NUMBER OF BROTHERS	.1119*	.0405	.0142	-.0208	-.0125	-.0196
NUMBER OLDER BROTHERS	.0862	.0087	-.0192	.0246	-.0371	-.0054
NUMBER YOUNGER BROTHERS	.0473	.0167	.0286	.0493	.0246	-.0042
NUMBER SISTERS	.0159	.0078	-.0178	-.0263	-.0338	-.0057
NUMBER OLDER SISTERS	.0474	-.0295	-.0527	-.0214	-.1313**	-.1089*
NUMBER YOUNGER SISTERS	-.0408	.0239	.0191	-.0203	.0593	.0371
SOCIOECONOMIC STATUS/JOB ASPIRED	-.0434	-.0651	-.2920**	-.1359**	-.6065**	-.2138**
SOCIOECONOMIC STATUS/JOB EXPECTED	-.0144	-.0807	-.0784	-.1546**	-.1616**	-.6289**
SOCIOECONOMIC STATUS/FATHER'S JOB	-.0110	-.0850	-.0585	-.0589	.7692**	.7266**
SOCIOECONOMIC STATUS/MOTHER'S JOB	-.0368	-.0887*	.1117*	.0643	.0428	-.0087
SOCIOECONOMIC STATUS/PATERNAL GRANDFATHER'S OCCUPATION	.0662	.1142*	-.0416	-.0739	.2662**	.2206**
ANNUAL INCOME NEEDED FOR LIFE STYLE	.1117*	.1988**	.0072	-.0078	.0835	.0388
FUTURE TIME PERSPECTIVE	.2719**	.0805	.0617	-.0375	.0623	.0402
TYPICAL CURRENT INCOME/JOB ASPIRED	.1432**	.1552**	.0298	.0034	.0854	.0558
TYPICAL CURRENT INCOME/JOB EXPECTED	.0296	.1942**	.0735	-.0473	.0835	.0716
SEMANTIC MEANING/JOB ASPIRED	-.0432	-.0120	.0429	.0396	-.0088	-.0411
SEMANTIC MEANING/JOB EXPECTED	-.1433**	-.1275**	.0537	.1065*	.0129	-.0111
SEMANTIC MEANING/SELF	-.0922*	-.1583**	.0487	.0063	-.0791	-.0349
CONGRUENCE SELF/ASPIRED JOB MEANING	.0418	.1224**	.0058	.0267	.0586	-.0041
CONGRUENCE SELF/EXPECTED JOB MEANING	-.0514	.0151	.0080	.0877	.0741	.0181
CONGRUENCE JOBS ASPIRED/EXPECTED MNG	.1045*	.1164*	-.0156	-.0710	-.0207	-.0253
IQ/SRA NON-VERBAL RAW SCORE	.0203	.0702	.0087	.0606	-.0477	-.0219
WORK VALUE: INTELLECTUAL STIMULATION	.0183	.0685	.0267	.0718	-.0058	-.0083
WORK VALUE: ACHIEVEMENT	-.0044	-.0874	-.0085	-.0471	-.0098	.0519
WORK VALUE: WAY OF LIFE	-.0461	-.1065*	.0734	-.0161	-.0841	-.0153
WORK VALUE: ECONOMIC RETURNS	.0571	-.0237	-.0404	-.1128*	.0202	.0293
WORK VALUE: ALTRUISM	-.0020	-.0948*	.0018	.0160	.0157	.1195**
WORK VALUE: CREATIVITY	.1284**	.0406	-.0249	.0039	-.0495	-.0009

TABLE 35 / CONTINUED

PREDICTOR VARIABLE	ENTREPRENEURIAL ASPIRE	ENTREPRENEURIAL EXPECT	OCCUPATIONAL KNOWLEDGE ASPIRED	OCCUPATIONAL KNOWLEDGE EXPECTED	OCCUPATIONAL MOBILITY ASPIRED	OCCUPATIONAL MOBILITY EXPECTED
WORK VALUE: ASSOCIATIONS	-.0261	.0406	-.0249	.0039	-.0495	.0009
WORK VALUE: SECURITY	.0580	.0038	-.0455	-.0730	-.1256**	-.0366
WORK VALUE: PRESTIGE	.1112*	-.0513	-.0744	-.0898*	-.0059	.0524
WORK VALUE: MANAGEMENT	.0744	.0454	-.0509	-.0482	-.0554	-.0019
WORK VALUE: AESTHETICS	.0237	-.0188	-.0109	.0187	-.0064	.0437
WORK VALUE: VARIETY	.1438**	.0339	-.1048*	-.1217**	-.0304	.0264
WORK VALUE: INDEPENDENCE	.1413**	.1145*	-.0040	-.0340	.0814	.0566
WORK VALUE: SUPERVISTORY RELATIONS	.0297	-.0692	-.0047	-.0659	-.1053*	-.0266
WORK VALUE: SURROUNDINGS	-.0194	-.0049	.0295	-.0670	-.0358	.0366
ENTREPRENEURIAL ASPIRATION		.4182**	.0213	.0212	-.0189	-.0013
ENTREPRENEURIAL EXPECTATION	.4182**		.0267	-.0075	-.1093*	-.1223**
OCCUPATIONAL KNOWLEDGE/JOB ASPIRED	-.0213	-.0267		.5147**	.1401**	.0087
OCCUPATIONAL KNOWLEDGE/JOB EXPECTED	-.0212	.0075	.5147**		.0392	.0606
OCCUPATIONAL MOBILITY ASPIRED TO	.0819	.1093*	.1401**	.0392		.7122**
OCCUPATIONAL MOBILITY EXPECTED	.0013	.1223**	.0087	.0606	.7122**	

*SIGNIFICANTLY DIFFERENT FROM ZERO AT P = .05; **SIGNIFICANTLY DIFFERENT FROM ZERO AT P = .01.

ations are found to be with entrepreneurial aspiration (+.4182) and with future time perspective (+.2719). Entrepreneurial aspiration is positively related only to entrepreneurial expectation among the principal variables of interest in this investigation; it is unrelated to knowledge of the aspired to or expected occupation and to the aspired to and expected rate of social mobility.

ENTREPRENEURIAL EXPECTATION: Table 35 reports positive correlations significant at .05 between entrepreneurial expectation and (1) the socioeconomic status associated with the occupation of the subject's paternal grandfather; (2) level of congruence between the semantic meanings of the aspired to and the expected occupations; (3) Independence as a work value; and (4) the rate of occupational mobility to which the subject aspires. Positive correlations significant at .01 are reported for (1) the subject's estimate of the annual income he will need to support the life style he anticipates; (2) the subject's estimate of the typical income currently earned by a person employed in the occupation to which he aspires; (3) the subject's estimate of the typical income currently earned by a person employed in the occupation which he expects to enter; (4) extent of congruence between the semantic meanings of self and of the aspired to occupation; (5) entrepreneurial aspiration; and (6) the rate of occupational mobility which the subject expects. Negative correlations significant at .05 are reported between entrepreneurial expectation and (1) the socioeconomic status associated with the mother's occupation (HOUSEWIFE is scored at zero on the Hamburger Scale); and (2) Way of Life and Altruism as work values. Negative relationships significant at .01 are found with (1) the semantic meaning of the occupation which the subject expects to enter and (2) the semantic meaning of self. The most substantial correlations are found to be with entrepreneurial aspiration (+.4182) and with the subject's estimate of the current annual income associated with the occupation to which he aspires (+.1988). Entrepreneurial expectation is related to the expected rate of social mobility and to enterpreneurial aspiration, but not to the other variables of principal research interest in this investigation.

ACCURACY OF KNOWLEDGE ABOUT THE OCCUPATION ASPIRED TO: Inspection of Table 35 reveals a positive correlation significant at .05 with (1) the socioeconomic status associated with the occupation held by the subject's mother. Positive correlations significant at .01 are found with (1) accuracy of knowledge about the occupation which the subject expects to enter and (2) the rate of occupational mobility to which the subject aspires. A negative relationship significant at .05 is reported between accuracy of knowledge about the aspired to occupation and Variety as a work value; a negative relationship significant at .01 is reported for the socioeconomic status associated with the occupation to which the subject aspires. The most substantial relationships are found to be with accuracy of knowledge about the expected occupation (+.5147) and the socioeconomic status level of the aspired to occupation (-.2920). However, it should be borne in mind that the values on the Hamburger Scale range from a high of 1 to a low of 7; hence, the coefficient reported between accuracy of knowledge and status level of the aspired to occupation should be interpreted that the higher the socioeconomic status level of the occupation aspired to the higher the subject's accuracy of knowledge about it. It is likely that the principal occupations cited by subjects at the upper socioeconomic status levels represent occupations which are more accessible to the public's scrutiny (as is the physician or the dentist) than are occupations cited in the middle status range. Accuracy of knowledge about the aspired to occupation is related to accuracy of knowledge about the expected occupation and to aspired to social mobility, but not to the other variables of principal research or substantive interest in this investigation.

ACCURACY OF KNOWLEDGE ABOUT THE OCCUPATION EXPECTED: Table 35 reports a positive correlation significant at .05 with the semantic meaning of the occupation which the subject expects to enter, and a positive correlation significant at .01 with accuracy of knowledge about the occupation to which the subject aspires. Negative relationships significant at .05 are found with Economic Returns and with Prestige as work values. Negative correlations significant at .01 are reported with (1) the socioeconomic status level associated with the occupation to which the subject aspires; (2) the socioeconomic status level associated with the occupation which the subject expects to enter; and (3) Variety as a work value. The cautions urged earlier in interpeting relationships based on the Hamburger Scale, for which 1 represents high status and 7 low, should be observed here. The most substantial correlation is found with accuracy of knowledge about the occupation to which the subject aspires (+.5147). Accuracy of knowledge about the expected occupation is unrelated to entrepreneurial aspiration or expectation or to aspired to or expected rate of social mobility.

RATE OF SOCIAL MOBILITY ASPIRED TO: Inspection of Table 35 reveals a positive correlation significant at .05 between the rate of social mobility to which the subject aspires (difference between socioeconomic status level associated with the occupation of S's father and the level associated with the occupation to which S aspires) and accuracy of knowledge about the occupation to which the subject aspires. Positive relationships significant at .01 are reported with (1) the socioeconomic status associated with the occupation of the subject's paternal grandfather; and (2) the rate of occupational mobility expected by the subject. Negative relationships signficant at .05 are observed with (1) entrepreneurial expectation and (2) Supervisory Relations as a work value. Negative relationships significant at .01 are found with (1) the number of older sisters reported by the subject; (2) the socioeconomic status level associated with the occupation which the subject expects to enter; and (3) Security as a work value. The most substantial relationships are found with rate of social mobility expected by the subject (+.7122) and with the socioeconomic status of the subject's paternal grandfather (+.2662). Again, it should be stressed that the values on the Hamburger Scale range from a high of 1 to a low of 7; hence, the latter coefficient should be interpreted that the lower the socioeconomic status of the subject's grandfather, the higher the rate of social mobility to which the subject aspires. The rate of social mobility aspired to is related (negatively) to entrepreneurial expectation, but unrelated to entrepreneurial aspiration or to accuracy of knowledge about the aspired to or expected occupations.

RATE OF SOCIAL MOBILITY EXPECTED: Table 35 reports positive correlations significant at .01 between the rate of social mobility which the subject expects (difference between socioeconomic status level associated with the occupation of S's father and the level associated with the occupation which S expects to enter) and (1) the socioeconomic status level associated with the occupation of the subject's paternal grandfather; (2) the rate of social mobility to which the subject aspires; and (3) Altruism as a work value. A negative relationship significant at .05 is found with the number of older sisters reported by the subject. Negative relationships significant at .01 are found with (1) the socioeconomic status level associated with the occupation which the subject aspires to enter and (2) entrepreneurial expectation. The most substantial correlations emerge with the rate of social mobility aspired to (+.7122) and with the socioeconomic status of the subject's paternal grandfather (+.2206). The rate of social mobility expected by the subject is related (negatively) to entrepreneurial expectation, but unrelated to the other variables of focal research interest.

POTENT AND IMPOTENT PREDICTORS: A number of the variables reviewed in Table 35 are related to more than one of the variables of focal research interest in this investigation, while other variables reviewed are not in significant relationship with any of the principal variables.

The number of older sisters reported by the subject is related at .01 to both aspired to and expected social mobility, but in a negative direction. The socioeconomic status level of the occupation to which the subject aspires is related negatively at .01 to the accuracy of his knowledge about the occupations to which he aspires and which he expects to enter (i.e., the higher the status of the occupation, the greater the knowledge), and to expected social mobility (the higher the status of the occupation aspired to, the greater the expected as well as aspired to social mobility). The socioeconomic status level of the expected occupation is related similarly to the subject's knowledge of his expected (but not aspired to) occupation and to rates of social mobility, all at .01. The socioeconomic status of the mother's occupation is related negatively at .05 to entrepreneurial expectation (the lower the status of the mother's occupation, the more likely the subject to respond affirmatively) and positively at .05 to accuracy of knowledge about the aspired to occupation. The socioeconomic status of the paternal grandfather's occupation is related positively at .05 to entrepreneurial expectation (the lower the status of the grandfather's occupation, the less likely is the subject to respond affirmatively), but positively at .01 to both aspired to and expected social mobility (the lower the status, the higher the rate).

The subject's estimate of the annual income needed to support the life style he anticipates is related positively at .05 to entrepreneurial aspiration and at .01 to entrepreneurial expectation. The semantic meaning of the occupation which the subject expects to enter is related negatively at .01 to both entrepreneurial aspiration and expectation but positively at .05 to accuracy of knowledge about the expected occupation. The semantic meaning of self is negatively related, at .05, to entrepreneurial aspiration and, at .01, to entrepreneurial expectation: the stronger the semantic meaning of self, the weaker the tendency to respond affirmatively.

The subject's estimate of the typical income earned by persons currently employed in the aspired to occupation correlates positively at .01 with both entrepreneurial aspiration and expectation, perhaps suggesting a powerful factor. Congruence between the semantic meanings of the expected and aspired occupations is correlated positively at .05 with both entrepreneurial aspiration and expectation (the greater the discrepancy, then the greater the tendency to respond affirmatively.

The work value Prestige is related positively at .05 to entrepreneurial aspiration, but negatively at .05 to accuracy of knowledge about the expected occupation. Variety relates positively at .05 to entrepreneurial aspiration but negatively to accuracy of knowledge about the aspired to and expected occupations, at .05 and .01 respectively. Independence relates to entrepreneurial aspiration positively at .01 and at .05 to entrepreneurial expectation.

Among the hard variables unrelated to any of the focal variables, the most intriguing is the subject's intelligence, which had been expected to relate to occupational knowledge, if not to entrepreneurial aspiration and expectation or to social mobility. Similarly unrelated to the focal variables of principal research interest are the number of older and younger brothers, the number of sisters and of younger sisters, the semantic meaning of the occupation aspired to, congruence between self and the semantic meaning of the expected occupation, and Intellectual Stimulation, Achievement, Associations, Management, Aesthetics, and Surroundings as work values. It is also important to observe that the subject's current socioeconomic status, derived from the occupation of his father, relates only to the two focal variables in which indeed it represents a member of the equation in their operationalization: aspired to and expected social mobility. But current socioeconomic status is unrelated to the principal variables in research focus. This finding is particularly important in view of the contamination between classificatory variables and social status noted earlier.

14. SUMMARY AND CONCLUSIONS

This investigation explored the occupational aspirations and expectations of some 531 black and white high school youth of both sexes from predominantly lower and lower middle socioeconomic status families in four New York State communities: Megalopolis (New York City), Middletown (Elmira), Exurbia (Patchogue), and Capitol City (Albany). Data were gathered through responses to a research questionnaire relating to family structure, occupational aspirations and expectations, sources of influence upon occupational development, and other variables; a revised form of Heimberg's Future-time Perspective Index; the Super Work Values Inventory; and the investigators' revision of the Murov Index of Occupational Knowledge.

Data analyzed through three-way analysis of variance (classificatory variables = race, sex, urban configuration) for factorial design, corrected for disproportionality, yielded the following results:

1. Level of occupational aspiration (socioeconomic status associated with the occupation aspired to, as determined through use of the Hamburger Revised Occupational Rating Scale) is associated with sex (males higher), race (blacks higher), and with urban configuration (Exurbia Ss highest) as significant sources of variance.

2. Level of occupational expectation (SES associated with the expected occupation) is associated with race (blacks higher), with urban configuration (Exurbia Ss highest), and with interaction between sex and urban configuration as significant sources of variance.

3. Accuracy of knowledge about the occupation aspired to (score on the revised Murov Index of Occupational Knowledge for occupation aspired to) is associated with urban configuration (Middletown Ss highest) as a significant source of variance, but not with race or sex.

4. Accuracy of knowledge about the expected occupation (score on the revised Murov Index) is associated both with sex (females higher) and with urban configuration (Middletown Ss again highest).

5. Social mobility aspired to (difference between SES level for aspired to occupation and current SES) is significantly associated with sex (males higher), with race (blacks higher), with urban configuration (Exurbia Ss highest), and with race-urban configuration interaction (black fe-

males in Exurbia highest; Megalopolis white males lowest).

6. Social mobility expected (difference between SES level for expected occupation and current SES) is significantly associated with race (black Ss higher) and with urban configuration (Exurbia Ss highest).

7. The semantic meaning of self (score on a nine-scale, factor-pure semantic differential schedule) is significantly associated with sex (females higher), with race (whites higher), and with race-sex-configuration interaction (Capitol City white females highest, Exurbia black males lowest).

8. The semantic meaning of the occupation aspired to (semantic differential score) is significantly associated with none of the principal or interactive sources of variance.

9. The semantic meaning of the occupation expected (semantic differential score) is significantly associated with urban configuration (Capitol City Ss highest) and with sex-race-configuration interaction (Capitol City white males highest, Megalopolis black males lowest).

10. Future time perspective (difference between current age and mean age derived from five future events projected by Ss with ages indicated) is significantly associated with sex (males higher), not with race or urban configuration.

11. Significant associations are observed on the following work values: Achievement (urban configuration); Way of Life (sex, urban configuration); Prestige (race); Independence (sex); Supervisory Relations (urban configuration, race-configuration interaction, race-sex-configuration interaction). No significant associations are observed for Intellectual Stimulation, Economic Returns, Altruism, Creativity, Associations, Security, Management, Variety, or Aesthetics.

Chi Square analyses yielded the following conclusions:

12. The influence of particular key figures cited by Ss as most influential in their occupational aspirations and expectations is significantly associated with interactive subsets representing race-sex-urban configuration. Family members, especially mother, are cited most frequently, school personnel relatively infrequently.

13. The influence of particular key sources cited by Ss as most influential in their occupational aspirations and expectations is significantly associated with interactive subsets representing race-sex-urban configuration. Conversations with relatives and friends are cited most frequently, traditional sources of occupational information relatively infrequently.

14. The distributions of the occupational aspirations and expectations, reported by Ss differ significantly from the distribution of projected manpower needs in New York State in ten occupational categories. Professional and kindred and technical occupations are grossly over-represented.

15. Entrepreneurial aspiration and expectation are differentially associated with interactive subsets representing race-sex-urban configuration. More Ss aspire to become entrepreneurs than chance would predict; more Ss expect to become employees than chance would predict.

Inter-correlations among the variables of focal research interest support the following conclusions:

16. Entrepreneurial aspiration is positively related to entrepreneurial expectation, but not to knowledge of aspired to or expected occupations nor to aspired to or expected mobility.

17. Entrepreneurial expectation is related positively to entrepreneurial al aspiration and negatively to expected rate of social mobility, but not to the other principal variables.

18. Accuracy of knowledge about the occupation aspired to is related positively to accuracy of knowledge about the expected occupation and to rate of social mobility aspired to, but not to other principal variables of focal interest.

19. Accuracy of knowledge about the occupation expected is related only to accuracy of knowledge about the occupation aspired to, not to the other focal variables.

20. The rate of social mobility aspired to is related positively to the rate of social mobility expected and negatively to entrepreneurial expectation, but not related to the other focal variables.

21. The rate of social mobility expected is related positively to rate of social mobility aspired to but negatively to entrepreneurial expectation and is unrelated to the other variables of principal research interest.

In general, these conclusions suggest that three clusters of variables, related to entrepreneurial aspiration and expectation, to occupational mobility, and to occupational knowledge, deserve consideration by researchers, by educators, and by counselors.

NEW YORK UNIVERSITY
School of Education

Department of Guidance & Personnel Administration

A STUDY OF OCCUPATIONAL CHOICE AMONG HIGH SCHOOL STUDENTS

Thank you for agreeing to participate in this study. You are being asked to answer the questions in this booklet and in the two accompanying tests to help us learn more about the things that affect high school students as they think about the kinds of jobs they would like to have.

An instructor will give you special directions for each question or for each set of questions. It is important that you understand each question and that you answer each question carefully. If at any time you do not understand a question or do not know what to do, please raise your hand. Please DO NOT try to work ahead. Wait until the instructor has read each item with you, has explained it and has told you to go ahead.

It is not necessary that you put your name on any of these papers. However, please check NOW to be sure that the number printed at the top of this page matches the number printed on the other two tests. Your responses, of course, are absolutely confidential; they have nothing whatever to do with your present school or with your school work.

When the instructor tells you to do so, please turn the page and follow his directions.

Circle your present grade in school: 10 11 12 (1)

Circle your sex: Boy Girl (2)

Circle your age: 14 15 16 17 18 19 (3)

What is your race? ____________________ (4)

What is your nationality? ____________________ (5)

What is your religion? ____________________ (6)

How many brothers do you have? ____________________ (7)

How many of your brothers are older than you? ____________________ (8)

How many of your brothers are younger than you? ____________________ (9)

How many sisters do you have? ____________________ (10)

How many of your sisters are older? ____________________ (11)

How many of your sisters are younger? ____________________ (12)

Please put a check-mark next to each of the following persons or groups of persons who live with you (in the same house or apartment): (13)

___ a. Father

___ b. Mother

___ c. Brothers

___ d. Sisters

___ e. Grandfather

___ f. Grandmother

___ g. Aunt

___ h. Uncle

___ i. Others---list below:

____

____

____

If you had a completely free choice about the matter, what job would you most LIKE to have when you are a fully grown adult? (14)

(14)____

Do you know personally anyone who has the job you would like to have? YES NO (15)

If your answer is YES, who is that person---what is his relationship to you (friend, relative)? (16)

(16)____

In what city or town would you LIKE to work? (17)

(17)____

What job do you EXPECT to have when you are a fully grown adult? (18)

(18)____

Do you know personally anyone who has that job? YES NO (19)

If your answer is YES, who is that person---what is his relationship to you (friend, relative)? (20)

(20)____

In what city or town do you EXPECT to work? (21)

(21)____

What is your FATHER's job? (22)

(22)____

In what city or town does he work? (23)

(23)____

What is your MOTHER's job? (24)

(24)____

What is (or was) the job of your GRANDFATHER on your father's side? (25)

(25)____

In what city or town does he (or did he) work? (26)

(26)____

WHO has influenced you in your thinking about the job you would like to have and the job you expect to have? Read through the list below. Then write "1" to indicate that this person has had the SINGLE GREATEST influence, "2" to indicate that this person has had the SECOND GREATEST influence, and "3" to indicate that this person has had the next or THIRD GREATEST influence upon you. Do this both for the job you would like to have and the job you expect to have.

Job I would like to have		Job I expect to have	
____	A person who has this job	____	(27a)
____	A buddy or close personal friend of mine	____	(28a)
____	A person who has a job different from this one	____	(29a)
____	A relative other than immediate family	____	(30e)
____	A neighbor or family friend	____	(31e)
____	My father	____	(32e)
____	My brother or sister	____	(33s)
____	A guidance counselor	____	(34s)
____	My mother	____	(35s)
____	A teacher	____	(36s)
____	A person not listed here (mention below)	____	(37s)

____

____

What job do you expect to get as your FIRST job---immediately after finishing or leaving school or college? **(38)**

(38)____

WHAT has influenced you in your thinking about the job you would like to have and the job you expect to have? Read through the list below. Then write "1" to indicate the SINGLE GREATEST source of influence, "2" to indicate the SECOND GREATEST source of influence, and "3" to indicate the THIRD GREATEST source of influence. Do this both for the job you would like to have and the job you expect to have.

Job I would like to have		Job I expect to have	
_____	Articles in magazines	_____	(39a)
_____	My extracurricular activities in school	_____	(40a)
_____	The school subjects I got my highest marks in	_____	(41a)
_____	Talking with a guidance counselor	_____	)
_____	The school subjects I got my lowest marks in	_____	(43e)
_____	Talking with personal buddies or close personal friends of mine	_____	(44e)
_____	Talking with family friends	_____	(45s)
_____	Talking with teachers	_____	(46s)
_____	Talking with relatives	_____	(47s)
_____	Talking with my father	_____	(48s)
_____	Talking with my mother	_____	(49s)
_____	Talking with people in this job	_____	(50s)
_____	My hobby	_____	(51s)
_____	A school class related to this job	_____	(52s)
_____	Reading "occupational information" pamphlets	_____	(53s)
_____	A book about this job	_____	(54s)
_____	Information from TV, radio, or movies	_____	(55s)
_____	A source not listed here (mention below)	_____	(56s)

____

____

What do you plan to do RIGHT after high school? (57)

(57)____

Do you have a job NOW? YES NO (58)

If your answer is YES, what is that job? (59)

(59)____

If you have a job now, how many hours per week do you work? (60)

(60)____

Please list here any other jobs you have had in the past and the number of hours you worked each week at each job:

Job title	Hours/week	
(61)____________________	__________	(61)
(62)____________________	__________	(62)
(63)____________________	__________	(63)
(64)____________________	__________	(64)

If you had a completely free choice in the matter, would you like to own your own business someday?

YES NO (65)

Do you expect to own your own business someday? YES NO (66)

How large an income will you need to lead the kind of life you would like to lead when you are a fully grown adult? (67)

(67) $____________________/per year

Listed below are several ways by which one might prepare for a particular job. For many jobs, several of these ways might be used by different persons. However, you are to decide which ONE of the ways listed is the BEST way to prepare for the job you would like to have and for the job you expect to have. You should put only one check-mark on the left side of the page and only one check-mark on the right side.

Job I would like to have		Job I expect to have	
_____	No special training is needed	_____	(68a)
_____	Take vocational courses in high school	_____	(69e)
_____	Become an apprentice	_____	(70s)
_____	Get on-the-job training	_____	(71s)
_____	Go to a special training school	_____	(72s)
_____	Get experience by starting in a lower job and working your way up	_____	(73s)
_____	Go to college	_____	(74s)
_____	Get an advanced degree (master's or doctorate) after graduating from college	_____	(75s)

In the spaces below, please list FIVE events which you expect will happen to you; then list the age you expect to be when each event will occur. It may be any event at all which you expect to happen, either in the immediate or distant future---for example, "Getting married." If you decided to list "Getting married" as one of these events, how old would you expect to be when that happened?

Event — Your age then

(76)______________________________ ____________ (76)

(77)______________________________ ____________ (77)

(78)______________________________ ____________ (78)

(79)______________________________ ____________ (79)

(80)______________________________ ____________ (80)

The jobs below have been listed according to the way most people judge the "prestige" of each job. Many jobs that could fit between those listed have been omitted. You are asked to decide where the job you would like to have and the job you expect to have would fit if they were added to this list. Put a check-mark on the left side of the page where you think the job you would like to have would fit and a check-mark on the right side where you think the job you expect to have would fit.

Job I would like to have		Job I expect to have
	Medical doctor	(81u)
	Minister	(82)
	Accountant in a large business	(83)
	Trained machinist	(84)
	Barber	(85)
	Salesclerk in a store	(86)
	Clothes presser in a laundry	(87)
	Collector of garbage	(88)

How much would you estimate the typical person employed TODAY in the job you would like to have and the job you expect to have earns in an hour, a week, or a year? Place a check-mark next to the closest figures.

Job I would like to have	**Per Hour /**	**Per Month /**	**Per Year**	**Job I expect to have**	
______	**$21**	**$3,350**	**$40,000**	______	**(89a)**
______	**$15**	**$2,500**	**$30,000**	______	**(90e)**
______	**$13**	**$2,000**	**$25,000**	______	**(91)**
______	**$10**	**$1,600**	**$20,000**	______	**(92s)**
______	**$8**	**$1,250**	**$15,000**	______	**(93s)**
______	**$5**	**$800**	**$10,000**	______	**(94s)**
______	**$4**	**$650**	**$8,000**	______	**(95s)**
______	**$3**	**$500**	**$6,000**	______	**(96s)**
______	**$2.50**	**$400**	**$5,000**	______	**(97s)**
______	**$2.00**	**$325**	**$4,000**	______	**(98s)**
______	**$1.50**	**$250**	**$3,000**	______	**(99s)**
______	**$1.00**	**$150**	**$2,000**	______	**(100s)**

On the next several pages, there are some pairs of words which can be used to describe people or things. Each pair contains words which are more or less opposite in meaning. The two words in each pair are separated by a broken line divided into seven parts.

Suppose you were asked to decide how well either of two words describes YOUR BEST FRIEND. Look at this example:

TALL ___:___:___:___:___:___:___ SHORT

If you think that the word TALL describes YOUR BEST FRIEND very well, then you would place an X on the line closest to that word, like this:

TALL _X_:___:___:___:___:___:___ SHORT

But if you think that the word TALL describes your best friend FAIRLY well, but not VERY well, then you would place an X on the second line nearest that word, like this:

TALL ___:_X_:___:___:___:___:___ SHORT

If you think that the word TALL describes your best friend ONLY SLIGHTLY, then you would place your X on the third line near that word:

TALL ___:___:_X_:___:___:___:___ SHORT

On the other hand, if you think the word SHORT describes your best friend very well, then you would place your X on the line nearest that word:

TALL ___:___:___:___:___:___:_X_ SHORT

If you feel that the word SHORT describes your best friend FAIRLY well, but not VERY well, htn you would place your X like this:

TALL ___:___:___:___:___:_X_:___ SHORT

If you think that the word SHORT describes your best friend only slightly, then you would place your X like this:

TALL ___:___:___:___:_X_:___:___ SHORT

But if you feel that neither TALL nor SHORT describes your best friend AT ALL, then you would place your X on the middle line, like this:

TALL ___:___:___:_X_:___:___:___ SHORT

On the following pages, try to judge one way or the other on each pair of words. Use the middle space only when you are sure that neither word in the pair is even slightly related to the persons or things you will be asked to judge. Please do not skip any pair of words.

Be sure to put your X on a line, not on the space between lines. But place only one X per line. Mark your first, true thoughts. Do not go back to any pair you have already judged.

Do NOT go on to the next page until the instructor tells you to do so.

PLEASE FOLD THE BOOKLET BACK SO THAT ONLY THIS PAGE SHOWS.

On this page, you are asked to judge:

A PERSON EMPLOYED IN THE JOB YOU WOULD LIKE TO HAVE

good ____:____:____:____:____:____:____ bad (101)

large ____:____:____:____:____:____:____ small (102)

alive ____:____:____:____:____:____:____ dead (103)

fast ____:____:____:____:____:____:____ slow (104)

valuable ____:____:____:____:____:____:____ worthless (105)

hard ____:____:____:____:____:____:____ soft (106)

strong ____:____:____:____:____:____:____ weak (107)

clean ____:____:____:____:____:____:____ dirty (108)

beautiful ____:____:____:____:____:____:____ ugly (109)

PLEASE FOLD THE BOOKLET BACK SO THAT ONLY THIS PAGE SHOWS.

On this page, you are asked to judge:
A PERSON EMPLOYED IN THE JOB YOU EXPECT TO HAVE

good	___:___:___:___:___:___:___	bad	(110)
large	___:___:___:___:___:___:___	small	(111)
alive	___:___:___:___:___:___:___	dead	(112)
fast	___:___:___:___:___:___:___	slow	(113)
valuable	___:___:___:___:___:___:___	worthless	(114)
hard	___:___:___:___:___:___:___	soft	(115)
strong	___:___:___:___:___:___:___	weak	(116)
clean	___:___:___:___:___:___:___	dirty	(117)
beautiful	___:___:___:___:___:___:___	ugly	(118)

PLEASE FOLD THE BOOKLET BACK SO THAT ONLY THIS PAGE SHOWS.

On this page, you are asked to judge:

YOURSELF

good	___:___:___:___:___:___:___	bad	(119)
large	___:___:___:___:___:___:___	small	(120)
alive	___:___:___:___:___:___:___	dead	(121)
fast	___:___:___:___:___:___:___	slow	(122)
valuable	___:___:___:___:___:___:___	worthless	(123)
hard	___:___:___:___:___:___:___	soft	(124)
strong	___:___:___:___:___:___:___	weak	(125)
clean	___:___:___:___:___:___:___	dirty	(126)
beautiful	___:___:___:___:___:___:___	ugly	(127)

The remaining sections are intended to test what you know about some aspects of the job you would like to have and the job you expect to have. Since these sections require careful explanation, PLEASE DO NOT GO ON FROM ONE SECTION TO THE NEXT UNTIL THE INSTRUCTOR HAS GIVEN YOU SPECIAL DIRECTIONS AND HAS TOLD YOU TO GO AHEAD.

REQUIRED EDUCATION

Job I would like to have		Job I expect to have	
7	At least 4 years of college are required	7	(128a)
6	At least two years of college or junior college are needed	6	(129e)
5	A high school education is needed	5	(129f)
4	An 8th grade education is needed	4	(129g)
3	A 6th grade education is needed	3	(129h)
2	A 4th grade education is needed	2	(129i)
1	No formal education is needed	1	(129r)

TRAINING TIME

9	Over 10 years	9	(130a)
8	Over 4 years and up to 10 years	8	(131e)
7	Over 2 years and up to 4 years	7	(132)
6	Over 1 year and up to 2 years	6	(133)
5	Over 6 MONTHS and up to 1 YEAR	5	(134)
4	Over 3 months and up to 6 months	4	(134b)
3	Over 30 DAYS and up to 3 MONTHS	3	(134c)
2	Up to and including 30 days	2	(134d)
1	Only a short demonstration	1	(134f)

APTITUDES

Job I would like to have		Job I expect to have	
G	General learning ability. Being able to "catch on" or to understand instructions; to reason and to make judgments.	G	(135a)
V	Ability to understand the meanings of words and the ideas they express and to use words effectively. To understand language and how words are used to present ideas and information clearly.	V	(136a)
N	Ability to perform arithmetic problems quickly and accurately.	N	(137a)
S	Ability to understand forms in space and to be able to picture in your mind how things of different shapes fit together---for example, in being able to read blueprints.	S	(138a)
P	Ability to notice important details in objects, pictures, or graphs. Ability to see slight differences in shapes and shadings of figures and in widths and lengths of lines.	P	(139a)
Q	Ability to notice important details in printed materials or tables. Ability to proofread, to check for mistakes in words and numbers and to avoid mistakes in arithmetic caused by reversing numbers.	Q	
K	Ability to move your hands and fingers quickly and accurately without having to look at what you are doing all the time.	K	(140e)
F	Ability to move your fingers and to handle small objects with your fingers quickly and accurately.	F	(141e)
M	Ability to move your hands easily and skillfully and to work with your hands in placing objects into positions or in turning objects.	M	(142e)
E	Ability to move your hands and feet quickly without having to look at what you are doing all the time.	E	(143e)
C	Ability to notice similarities and differences in colors, or in shades of the same color; ability to identify a color, or to recognize colors that go well together.	C	(144e)

SITUATIONS

Job I would like to have		Job I expect to have	
1	Situations involving many different duties and frequent changes.	1	(145a)
2	Situations where the duties require you to do the same thing over and over according to a set plan.	2	(146a)
3	Situations involving doing thing only under specific orders, with little or no room for you to act on your own.	3	(147a)
4	Situations requiring you to direct, control, and plan an entire activity or the activities of others.	4	(148a)
5	Situations where it is necessary to deal with people in your actual job duties, in addition to giving and receiving instructions.	5	(149a)
6	Situations involving working alone, away from others, although what you are doing may be a part of a project involving others.	6	(150a)
7	Situations involving your influencing people in their opinions, attitudes or judgments about ideas or things.	7	(151e)
8	Situations which involve doing the right thing under pressure, when the unexpected may happen or when you have to take a chance.	8	(152e)
9	Situations involving your deciding what is best or right to do, based on what you know about your job as a result of experience.	9	(153e)
0	Situations involving your deciding what is best or right to do, based on what you know about your job as a result of study.	0	(154e)
X	Situations involving the interpretation of feelings, ideas, or facts in terms of your personal viewpoint.	X	(155e)
Y	Situations involving meeting exact demands of measurements or limits.	Y	(156e)

PHYSICAL DEMANDS

Job I would like to have		Job I expect to have	
S	Involves mostly sitting with some walking or standing required; may have to lift and/or carry no more than 10 pounds.	S	(157a)
L	Involves lifting up to 20 pounds and FREQUENT lifting and carrying of no more than 2o pounds.	L	(158a)
M	Lifting at most 50 pounds, with FREQUENT lifting and/or carrying of no more than 25 pounds.	M	(159a)
H	Lifting at most 100 pounds, with FREQUENT lifting and/or carrying of no more than 50 pounds.	H	(160a)
V	Lifting over 100 pounds, with FREQUENT lifting and/or carrying of more than 50 pounds.	V	(161a)
2	Climbing and/or balancing.	2	(162e)
3	Stooping, kneeling, crouching and/or crawling.	3	(163e)
4	Reaching, handling, fingering, and/or feeling.	4	(164e)
5	Talking and/or hearing.	5	(165e)
6	Seeing (good eyesight).	6	(166e)

WORKING CONDITIONS

I	Inside.	I	(167a)
O	Outside.	O	(168e)
B	Both inside and outside.	B	(169z)